PROFILE OF THE BRITISH COLUMBIA HIGH TECHNOLOGY SECTOR

2007 EDITION

Prepared for the Ministry of Economic Development and the Ministry of Advanced Education

BRITISH COLUMBIA
The Best Place on Earth

BCStats

Profile of the British Columbia High Technology Sector

2007 Edition

A joint project of:

BC Stats,

Ministry of Economic Development

and

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BRITISH COLUMBIA

The Best Place on Earth

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Table of Contents

Executive Summary 1

Introduction 5

Profile and Trends 11
- Gross Domestic Product 11
- Revenue 13
- Employment 14
- Wages and Salaries 16
- Establishments 18
- Self-Employment 20
- Commodity Exports 21
- Commodity Imports 26
- Commodity Trade Balance 28
- Services Exports 29

BC's High Technology Industry in Context 31
- Provincial Comparison 31
- Comparison with the United States 35

Detailed Tables 41

Appendix A: Defining the High Technology Sector 75

Appendix B: Defining High Technology Commodities 83

Executive Summary

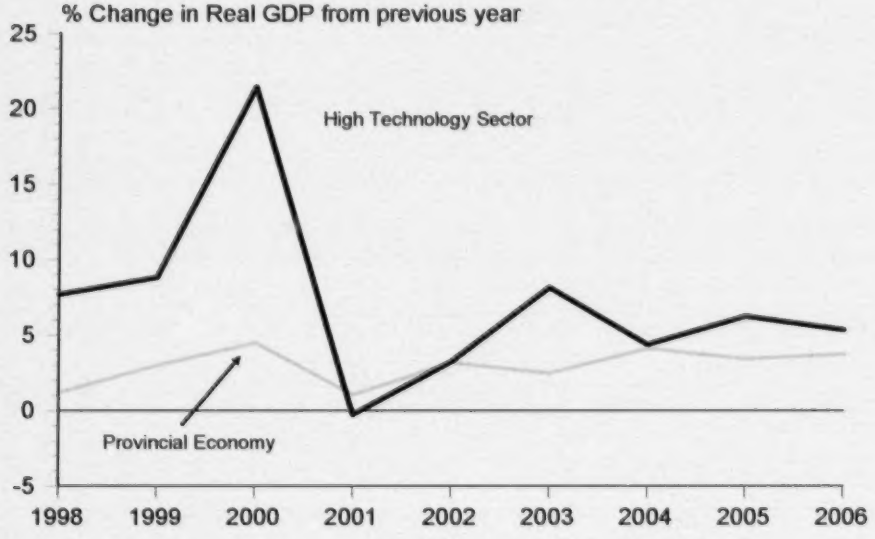
British Columbia's high technology sector is still relatively small, but it is growing and has gained a foothold in the provincial economy. The province is now home to some high tech clusters in areas such as digital media, biotechnology and "green" technologies that are world-class and, in some cases, world leaders. Developments such as a new masters program in digital media offered by several BC educational institutions and a new Microsoft facility planned for Vancouver should further enhance the province's tech sector.

BC's high technology sector expanded in 2006

In 2006, high tech in BC hit new heights in almost every major indicator, including employment, gross domestic product (GDP) and revenue. The growth from 2005 to 2006 exceeded that of the overall industrial aggregate in almost every category.

High technology GDP jumped 5.3% in 2006, climbing to over $9.4 billion, the highest level ever recorded. Both manufacturing and service industries contributed to the increase and the particularly strong growth in manufacturing GDP (+12.0%) helped the high tech sector expand faster than BC's overall economy. High technology accounted for approximately 5.2% of British Columbia's overall economic output in 2006.

BC's high technology sector outperformed the overall economy in 2006



Similar to GDP, high technology revenues in British Columbia also hit a new high, jumping 9.8% to $15.9 billion. Once again, both the

goods and services sectors contributed to the strong growth as revenues from high tech manufacturing climbed 12.6%, while service sector revenues expanded 9.2%.

Continuing with the theme, British Columbia's high technology sector employed more people in 2006 than ever before. High tech employment in the province rose 6.3% in 2006 to 74,590 with an increase in both service (+7.0%) and manufacturing (+3.0%) jobs. There were more people working in high tech jobs in BC in 2006 than there were working in the forest sector and mining, oil and gas extraction industries combined.

With more high tech workers in the province than ever before, wages and salaries also reached a new high, topping $4 billion for the first time. British Columbia's high technology sector paid out 9.8% more in wages and salaries to its employees in 2006 compared to a year earlier. At $1,080, average weekly earnings in the high tech sector significantly exceed the overall BC average weekly wage rate of $740.

The higher numbers of workers were employed by more high tech businesses. The number of high technology establishments in BC (excluding those with no employees) grew 5.2% to 9,206 in 2006, the most high tech businesses the province has ever seen. The bulk of these establishments, or 91%, were in service sector industries. There were 13,268 establishments with no employee payroll (which can be seen as a proxy for the number of self-employed people with no paid help) in the high technology sector, bringing the total number of high tech establishments to 22,474 in 2006.

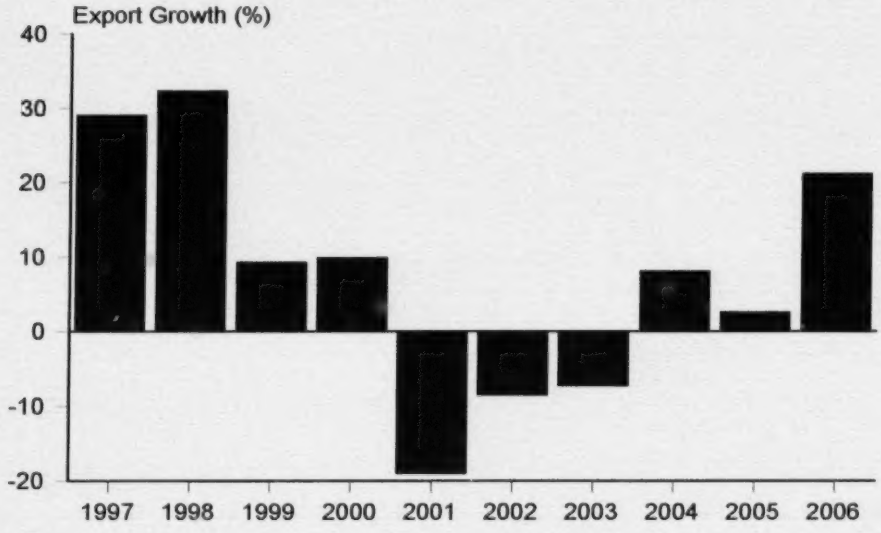
Exports and imports of high tech goods increased in 2006

International trade is an important aspect of the high technology sector, as reflected in the high volume of two-way trade. The domestic market for high technology goods does not have sufficient volume to achieve the economies of scale needed to remain competitive and in some cases, BC manufacturers do not produce enough of some types of goods to satisfy domestic demand. As such, both exports and imports play an important role in BC's high tech sector.

The value of British Columbia's high technology commodity exports soared 21.1% in 2006, climbing to $852.6 million, its highest level since 2000. Exports to the United States, BC's largest market, rebounded from a 4.5% drop in 2005 with a 20.7% increase in 2006. Substantial growth in the value of shipments to Italy (+140.0%) and Belgium (+387.8%) helped boost exports to the European Union

51.8%. However, high tech commodity exports to Pacific Rim countries actually fell in 2006, slipping 3.8%, mainly due to slumping shipments to Hong Kong (-34.0%) and Mainland China (-24.1%).

BC high tech exports experienced robust growth in 2006



The value of high tech imports edged up 2.6% in 2006, despite a 10.1% drop in shipments from the United States. Falling imports from the United States over the last few years have been offset by concurrent growth in shipments from Mainland China.

British Columbia imports substantially more high technology goods than it exports and, as a result, the province runs a trade deficit in these commodities. The change in the value of exports in 2006 was more or less matched by the change in the value of imports such that the balance of trade in high tech goods remained virtually unchanged, at approximately $3.4 billion.

Computers and telecommunications products dominate both exports from and imports to British Columbia, with life sciences products, which are mainly comprised of medical equipment, and aerospace goods the next two most important commodity groups. The United States is by far the most significant destination for BC high tech commodity exports with 69% of the goods shipped there in 2006. By comparison, only 11% of BC's high tech goods were shipped to Pacific Rim countries and 13% to the European Union. The United States is also the top origin of imports of high tech goods into BC, but the distribution is much less concentrated as only 35% of high tech imports come from the United States, while Mainland China ships 19% of the high tech goods destined for British Columbia.

As important as trade in goods is to BC's high tech sector, it is still small compared to trade in services. In 2006, the value of high tech service exports was three times that of international shipments of high tech goods. The value of high tech service exports from BC climbed 8.7% in 2006, largely due to strong growth in computer and related services.

BC ranks fourth in the country in most measures of high tech

Compared with the rest of Canada, British Columbia's high technology sector ranked fourth in most measures of high technology, including GDP, revenue, employment and value of international exports. The province has a much smaller high tech sector than the majority of states in the US as well, with high technology making up a far smaller share of employment and GDP compared to most states.

Nevertheless, British Columbia's high technology sector has undergone significant growth in the last decade and is likely to emerge as an even more important segment of the provincial economy in the years to come. The increasing penetration of high technology into all facets of life, including the adoption of high technology procedures and equipment in many "traditional" industries, such as forestry, mining and agriculture, should ensure that this sector will continue to expand and British Columbia's presence in the sector should continue to grow as well.

Introduction

The BC high technology sector

By its very nature, high technology is a concept that varies from year to year, as technologies that are cutting edge one day become old news the next. The pace of technological advancement exploded in the last quarter of the twentieth century and has continued to move at breakneck speed since. Some of the recent technological achievements are things that were not even contemplated as little as 20 years ago, or were the stuff of science fiction. The rapid rise of the Internet and the proliferation of high tech devices such as multi-use cell phones, DVD players and so on have changed the way we live and do business.

In British Columbia, high technology has gained a foothold in the provincial economy and the province is now home to some high tech clusters in areas such as digital media, biotechnology and "green" technologies. In fact, the magazine *Fast Company* selected Vancouver as one of the 30 "fastest cities" in the world, placing it in the "Green Leaders" category, indicating that Vancouver is a world leader in environmental businesses.[1] One environmental technology in which British Columbia leads the way is fuel cells. In a recent visit to the province, California Governor Arnold Schwarzenegger underlined his commitment to help BC develop this technology, reiterating the plan to build refuelling stations for hydrogen-powered vehicles across the Pacific Northwest and creating a "hydrogen highway" stretching from British Columbia to California.

British Columbia has long been a leader in digital media technologies, particularly in the gaming sector, with Vancouver-based industry giant Electronic Arts creating some of the world's most popular computer games. Starting this year, digital media will get even more exposure in the province as the University of British Columbia, Simon Fraser University, the Emily Carr Institute of Art and Design, and the British Columbia Institute of Technology begin offering master's degrees in digital media.

Another positive sign for British Columbia's high technology sector is the announcement that Microsoft plans to open a software development centre in Vancouver that will initially employ between 200 and 300 people, but could grow to employ up to 1,000 people. Vancouver is seen by Microsoft as a good place for attracting talent.

[1] See http://www.fastcompany.com/cities/2007/
A "fast city" is one that is considered ideal for business.

Canada's immigration policies are less restrictive than those of the United States when it comes to technology workers and it should be easier for the company to entice talented computer science graduates from countries such as India and China, as well as those from other parts of Canada. The strong presence of a company of the magnitude of Microsoft should further enhance the city's reputation as a centre for high technology and could result in other companies investigating Vancouver as a place to locate.

The study of high technology

The impact that technology has had on the economic and social landscape underlines the importance of the role of technology in the economy as an area of study. The *Profile of the High Technology Sector* is part of an ongoing project to monitor the growth and evolution of the high technology sector in British Columbia by evaluating the economic contribution of firms in the province that produce high technology goods and services. The key indicators examined include gross domestic product, revenue, employment, wages and salaries, establishment counts and international trade.

The designation of a high technology sector among the other industrial sectors of the economy provides a very useful analytic tool. This is based on the premise that high technology firms behave in a way that allows them to be understood as a group, and that programs or policies can be tailored to their needs.

Defining high technology

High technology is usually associated with growth and development. Since research and development (R&D) is the basis for technological advancement, those industries that perform a significant amount of R&D often have a considerable high tech component. However, an industry does not necessarily need to have a high degree of R&D involvement to be considered high tech. Industries that produce goods or services that are uniformly recognized as high tech are also included in the high technology sector. The concept of the high technology sector used in this report is basically product-based; therefore, some manufacturers that employ advanced processes are not included. In other words, just because a good is produced using advanced processes does not automatically make it a high tech product. For example, a mushroom produced in a high tech greenhouse is still just a mushroom.

Since the concept of high technology is constantly changing, it is difficult to define. Nevertheless, there are many different definitions of high technology in use around the world. The *Profile* report uses two different definitions—one that is industry-based and an-

other that is commodity-based—to measure, respectively, high tech's contribution to the British Columbia economy and the volume of international trade in high technology goods.

High technology is described using two different definitions – one that is industry-based and another that is commodity-based

Since the inception of the *Profile* reports in 1996, statistics on the high technology sector have been built up using information from industries within the sector. A more accurate approach would be to identify the firms felt to comprise the sector, then conduct surveys to obtain the information needed to conduct the desired analyses; however, the cost of such an approach would be substantial. Data by standard industries defined under the North American Industry Classification System (NAICS)[2] is largely available from Statistics Canada, which makes an industry-based approach not only significantly less costly, but also offers consistency with other Statistics Canada data, as well as comparative data for other provinces and the United States and a reasonable degree of accuracy.

It should be noted that the high technology definition used by BC Stats is a British Columbia-focused classification and that some high technology industries that are not present in British Columbia, but may be prevalent elsewhere, may be excluded from the data presented in this report. Conversely, some industries that have a substantial high tech component in British Columbia and are therefore included in the high technology sector may be mainly low tech in other regions. For example, British Columbia has a significant fuel cell cluster, including the company Ballard Power Systems, which is considered a world leader in the design and production of fuel cells. The fuel cell industry is included in the NAICS classification 335990 (all other electrical equipment and component manufacturing), which is generally not considered a high technology industry, but with the fuel cell cluster in BC it makes sense to include it in the high tech sector.

The BC Stats definition of high technology is British Columbia-focused

The industry-based definition includes manufacturers of pharmaceuticals and other chemicals, computers and other electronic products, aerospace products and parts, and medical equipment and supplies. Also included are service industries such as engineering, computer services, motion picture and video production, surveying and mapping, scientific and technical consulting, telecommunications, and research and development.

[2] NAICS is a system of classifying industries developed in cooperation between Statistics Canada, the United States Office of Management and Budget and the Instituto Nacional de Estadística, Geografía e Informática of Mexico.

For more discussion on the industry-based definition, including a complete listing of the industries included in BC Stats' high technology definition, see Appendix A, "Defining the High Technology Sector."

While an industry-based definition makes sense when examining high technology GDP or employment, it is not really appropriate for looking at trends in high tech commodity exports and imports. For this purpose, a second, commodity-based, definition was developed. This definition was constructed using harmonized system codes, which are the commodity classification codes used in Canadian customs documents. The list of commodities to be classified as high technology was based on the US Bureau of the Census' advanced technology products (ATP) list, which has been established for quite some time and is a recognized definition of high technology goods. Since Canadian and American commodity codes are identical only at the six-digit level and Canadian export codes are eight digits and import codes are ten digits, it was necessary to do some conversion. As a result, the final definition may not be completely identical to that used in the United States; however, it should be reasonably similar such that broad comparisons can be made.

For more detail on the commodity-based definition and a brief description of the ATP categories, see Appendix B, "Defining High Technology Commodities."

New to this year's edition

This report includes the latest information available as of August 2007. All data in this paper refer to the calendar year 2006. It should be noted that the data included in these annual reports contain revisions, such that data for previous years that have been published in earlier reports may be different from those contained in this report.

With this edition, employment and wage data for the United States have been extended an additional four years back to 1997, such that they are now consistent with most of the other data tables in the report. Data for the United States are reported for the top 20 states based on employment, although other states where high technology comprises a significant portion of the economy are mentioned in the text. The order of the states in each of the data tables is kept consistent for easier comparison and is based on the size of the high technology workforce. Note that data for GDP and revenue by industry for the United States are not yet available for 2006 with the detail needed to estimate the high tech sector. Estimates were pre-

pared for the United States as a whole, but these figures should be considered very preliminary and should be used with caution. There was no attempt made to estimate GDP and revenue by state.

Readers should note that graphs and text in this publication deal only with the highlights of the information that has been collected. The data tables in the final sections contain additional detail that can prove valuable.

Input Indicators of the BC High Technology Sector

This *Profile* report provides a basic overview of the outputs of the high technology sector in British Columbia; however, it is also useful to look at the inputs to the high technology sector. To this end, BC Stats produces a companion report: *Input Indicators of the BC High Technology Sector*. The high technology sector and the infrastructure network that surrounds it is a complex system with many players and interactions. The *Indicators* report provides measures of the inputs to the high technology sector and the overall climate of innovation. It covers a variety of activities with respect to high technology in the educational, business, government, external and labour sectors. Whenever possible, the indicators are presented in comparison to other provinces, which serve as benchmarks for the situation in British Columbia. The 2007 edition of the *Indicators* report will be released late in 2007 or early in 2008.

Profile and Trends

High technology performs well in BC in 2006

British Columbia's high technology sector has fully recovered from the doldrums experienced when the high tech bubble burst earlier in the decade and is now booming with solid growth in all major economic indicators. In 2006, high tech in BC hit new highs in almost every major indicator, including employment, GDP and revenue. The growth from 2005 to 2006 exceeded that of the overall industrial aggregate in almost every category. While British Columbia's high technology sector is still relatively small compared to many nearby jurisdictions, it continues to expand and has become an important element of the provincial economy.

High tech sector GDP shows strong growth in 2006

High technology **gross domestic product (GDP)** jumped 5.3% in 2006, climbing to over $9.4 billion, the highest level ever recorded.[3] Both manufacturing and service industries contributed to the increase.[4] BC's high tech manufacturing sector bounced back from a 1.3% decline in 2005 with a robust 12.0% rise in 2006, while GDP of high tech services grew 3.9%, including an 11.0% boost in engineering output.

BC's high tech GDP grew 5.3% in 2006 to a new high of $9.4 billion

Gross domestic product (GDP) is a measure of value added, which is essentially the difference between the cost of the material inputs and purchased services used in production and the price at which a good or service is sold. GDP can be reported using either current or constant dollars. Constant dollar, or real, GDP is the best measure for understanding and illustrating trends over time. Constant dollar figures have been adjusted to remove the effect of price changes (i.e., inflation and deflation) over time. This means that constant dollar values can be viewed as measures of the actual value added, or net output, of an industry.

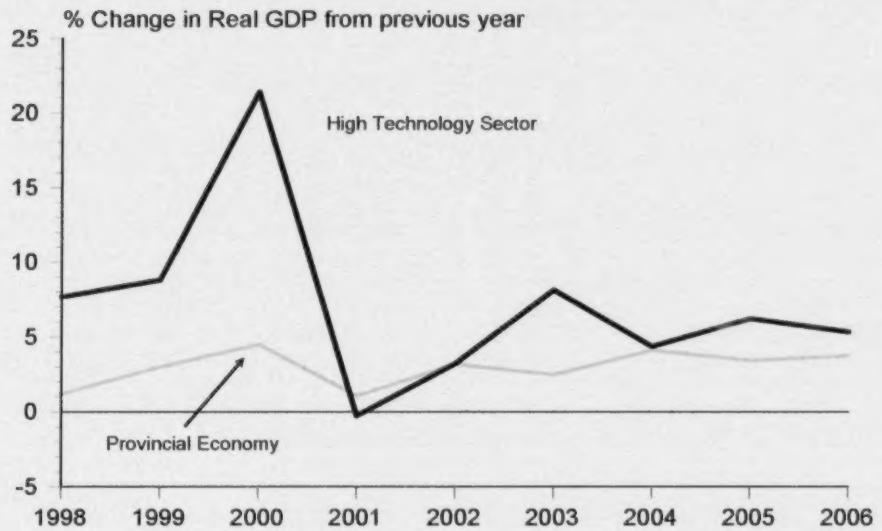
[3] All GDP figures quoted in this paper are in 1997 constant dollars unless otherwise stated.

[4] Throughout this report, there are two types of industries examined: service and manufacturing industries. High tech service industries—computer design, engineering, telecommunications, film and video production and information services—do not make a tangible good. Instead they provide expertise, such as software creation, information technology system management, the planning and design of a bridge, or the analysis of a blood sample for medical diagnosis. Manufacturing industries are those that take raw materials, or the products made by other manufacturing industries, and make new products. High technology firms include those involved in manufacturing of aircraft, computer and related products and pharmaceutical goods, just to name a few. While companies often engage in a variety of activities that may include both a manufacturing and a service component, they are classified as either a goods or service-producing industry based on the activity that is their main source of revenue.

The strong growth in the manufacturing sector helped the high tech sector expand faster than BC's overall economy. The 5.3% rise in high technology output was well over the 3.7% change in BC's industrial aggregate GDP. BC's high tech sector has consistently outperformed the overall economy over the last decade, with the exception of 2001 and 2002, when high tech was suffering the effects of the dot com crash. In 2001, high tech GDP slipped 0.3% at the same time BC's economy saw a 1.1% improvement, while in 2002, both high technology and overall GDP grew at the same rate of 3.2%.

Figure 1

BC's high tech sector outperformed the overall economy in 2006



Compared to high technology in some other provinces and states in the US, the sector in BC is still relatively small. Nevertheless, high tech plays a significant role in BC's economy, generating approximately 5.2% of the province's GDP in 2006, putting it in the same ballpark as industries such as public administration and educational services.[5] The financial, insurance and real estate and leasing sector (including owner-occupied dwellings) generates the greatest contribution, at approximately 22% of GDP.

High tech comprises about 5.2 percent of British Columbia's GDP

[5] This percentage is calculated using current dollar GDP estimates, since the constant dollar value of the BC industrial aggregate is chained and chained data is not additive, therefore the percentage can not be properly calculated.

Services constitute the bulk of high tech GDP in BC

Almost 82% of the province's high tech GDP was generated by service sector industries in 2006. This amounted to $7.7 billion, compared to only $1.7 billion derived from high tech manufacturing industries. Output from computer and related services alone exceeded that of all high tech manufacturing, at a shade under $2.1 billion.

BC GDP, 2006
(constant 1997 dollars)

	$million	% change
Manufacturing	1,728	12.0
Services	7,703	3.9
High Tech Total	**9,431**	**5.3**
BC Total	**136,050**	**3.7**

Robust growth for high technology revenue in 2006

Revenues in British Columbia's high technology sector jumped 9.8% in 2006 to $15.9 billion, marking the fifth consecutive year in which high tech revenues in the province have increased. Once again, both the goods and services sectors contributed to the strong growth as revenues from high tech manufacturing climbed 12.6%, while service sector revenues expanded 9.2%.

High tech revenue in BC rose 9.8% to $15.9 billion in 2006

Revenue is the amount of money earned from the sale of goods or services by producers in an industry. It is a measure of the monetary value of an industry's goods and services, and in the manufacturing sector, is measured through the value of shipments. Revenue includes the cost of the inputs necessary to make the goods or services, while GDP is the amount remaining after all costs (except labour costs) have been paid.

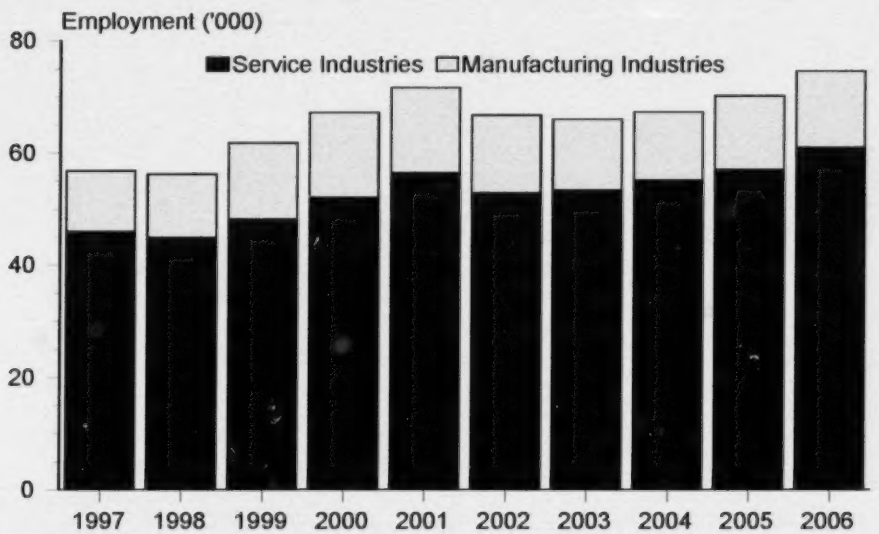
Within the service sector, the strongest growth was in motion picture production and post production, which saw revenues increase 17.2%, despite the strong Canadian dollar, which is creating challenges for BC's movie industry in terms of continuing to attract American productions. Computer and related services (+12.5%) and engineering (+11.9%) also saw double-digit increases, while telecommunications (+4.8%) and "other services" (+6.1%), which includes surveying and mapping, environmental and technical consulting, and research and development, experienced more modest growth. For computer and related services, 2006 marked the fourth consecutive year of double-digit growth in revenues.

More people were employed by high tech in BC in 2006

British Columbia's high technology sector employed more people in 2006 than ever before. High tech employment[6] in the province rose 6.3% in 2006 to 74,590 with an increase in both service (+7.0%) and manufacturing (+3.0%) jobs. Job growth in BC's high tech sector was higher than that of overall employment in the province, which was up 4.4% from a year earlier. Although the jump in employment was significant, it is possible that it could have been even higher if it were not constrained by the current tight labour supply in the province and in the sector in general. Many information technology jobs are going unfilled as there aren't enough skilled workers available to meet the demand. According to a 2007 survey of Canadian high technology companies, approximately 78% were currently experiencing a shortage of technically skilled talent and 90% anticipated a shortage in the next three to five years.[7]

High tech employment in BC increased 6.3% to 74,590 in 2006

Figure 2 **High tech employment at all-time high in 2006**



[6] The measure of employment used in this report is based on Statistics Canada's Survey of Employment, Payroll and Hours (SEPH). This employer survey provides a wealth of detail about employment, wages and hours in a large number of industries. However, because it is an employer survey, the SEPH data does not include self-employed workers and workers in commercial fishing, agriculture and some services.

The data from SEPH give an average number of workers in an industry through the course of the year. If an industry is highly seasonal, the peak number of workers is offset by those months where there are fewer workers. A full-time worker is accorded equal status with a part-time worker. No attempt is made to measure the number of "person years" or "full-time equivalents."

[7] *Coming of Age: 2007 TechTalent Pulse Survey Report.* (2007). Deloitte.

Of those who are at work in BC's high tech sector, approximately four out of every five are employed in a service industry. The computer and related services industry is by far the largest employer in BC's tech sector, generating over a third (34%) of the province's high tech jobs. Telecommunications businesses also employ significant numbers in BC, but the industry has shed almost 5,000 jobs since 1997. The 3.3% increase in 2006, which pushed telecommunications employment to 11,530, was likely a recovery from the lengthy strike of Telus employees that took place in 2005. Since the data used to calculate high tech employment is based on an annual average, the four-month strike involving an employer the size of Telus almost certainly dragged down total employment in 2005 and a strike-free year in 2006 would have been recorded as an increase even if the number of employees working for the company stayed the same.

In terms of percentage increases, the top job increases were in "other services" (+14.7%) and engineering (+11.0%). Employment in motion picture production and post production (+5.6%) and computer and related services (+5.3%) also saw strong growth.

BC Employment, 2006

	Workers	% change
Manufacturing	13,590	3.0
Services	61,000	7.0
High Tech Total	**74,590**	**6.3**
BC Total	**1,822,400**	**4.4**

Overall, approximately 4.1% of the province's work force was employed in the high technology sector in 2006. The 74,590 people working in high technology industries in BC in 2006 exceeded the total number of British Columbians working in the forest sector, which includes logging, silviculture and wood and paper manufacturing industries (approximately 59,500 employees), and mining, oil and gas extraction industries (13,300 employees) combined.

In BC, more people work in high tech than in forestry and mining-related industries

High tech wages and salaries hit new heights in 2006

British Columbia's high technology sector paid out 9.8% more in wages and salaries[8] to its employees in 2006 compared to a year earlier. By comparison, the overall growth rate of wages and salaries for the province as a whole was 8.4%. The total compensation for BC's high tech employees topped $4 billion for the first time. Pay in high tech services experienced a second consecutive double-digit increase (+10.6%), while remuneration in high tech manufacturing jobs also saw robust growth, rising 6.1%. All high tech industry groups saw increases in wages and salaries, with "other services" leading the way (+25.4%). The motion picture industry saw its third straight year of double-digit growth in compensation, with wages and salaries surging 17.1% over levels paid out in 2005, while the engineering industry followed up a whopping 35.4% jump in pay in 2005 with an 11.9% boost in 2006.

High tech wages and salaries in BC topped $4 billion in 2006

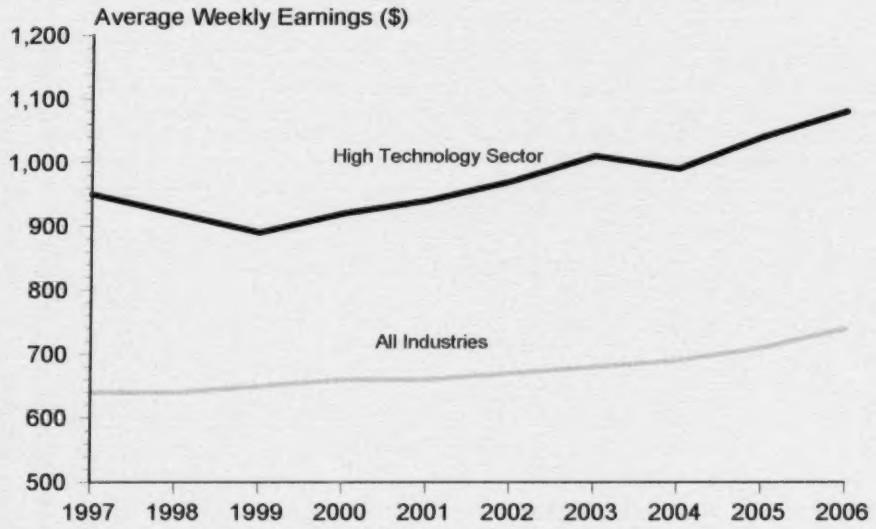
Much of the increase in wages and salaries was due to higher employment levels as average weekly earnings in high technology industries were up only 3.3% in 2006, slightly below the 3.8% rise in compensation for workers in the province as a whole. However, average pay in the motion picture industry jumped 10.9%, while employees in "other services" industries saw their earnings increase 9.3%.

Despite the overall lower growth rate in average weekly earnings, employees in high technology occupations earned far more in 2006 than the average employee in the province. High tech workers earned an average of $1,080 per week, compared to an overall average of only $740 for employees in all industries. The biggest difference between high tech wages and overall earnings was in the service sector, where the average weekly wage was $1,100 in high tech industries compared to only $700 in the service sector overall. Employees in high tech goods industries also earned more per week ($990) compared to the overall average for workers in British Columbia's goods industries ($925).

Average weekly earnings are far higher in high tech industries

[8] Wages and salaries are based on the earnings of all workers in an industry who are on the payroll, from working owners and senior executives to junior support staff. While overtime and bonus pay are included, other benefits such as medical plans, stock options and time off in lieu of overtime are not. Like the employment values described earlier in this report, the wages and salaries data are calculated using source data from Statistics Canada's Survey of Employment, Payroll and Hours.

Wages in high technology industries are far higher than the average for all industries in the province **Figure 3**



The wage disparity in high tech is likely due to a combination of greater skill requirements relative to many jobs, as well as a strong demand for skilled high technology workers, therefore requiring greater pay to both attract and retain them. With so many employment opportunities available due to shortages of both skilled and unskilled labour, it is likely that wages will continue to rise. It is also possible that many young people will eschew pursuing college and university years that take years to obtain in favour of entering a trade that offers on-the-job training and an immediate income stream, which could further reduce the available talent pool for tech industries looking for computer specialists and other occupations that need post-secondary training. If this happens, and there is evidence to suggest it is already occurring, high tech employers in BC and elsewhere will likely have to enhance their wage and benefit packages in order to attract qualified employees from other jurisdictions or to encourage more young people to pursue training in relevant areas. The result could be that wage inflation in the high tech sector could take off over the next several years. The alternative is that the sector could be constrained in size due to a shortage in available skilled labour.

More high tech establishments in BC than ever before

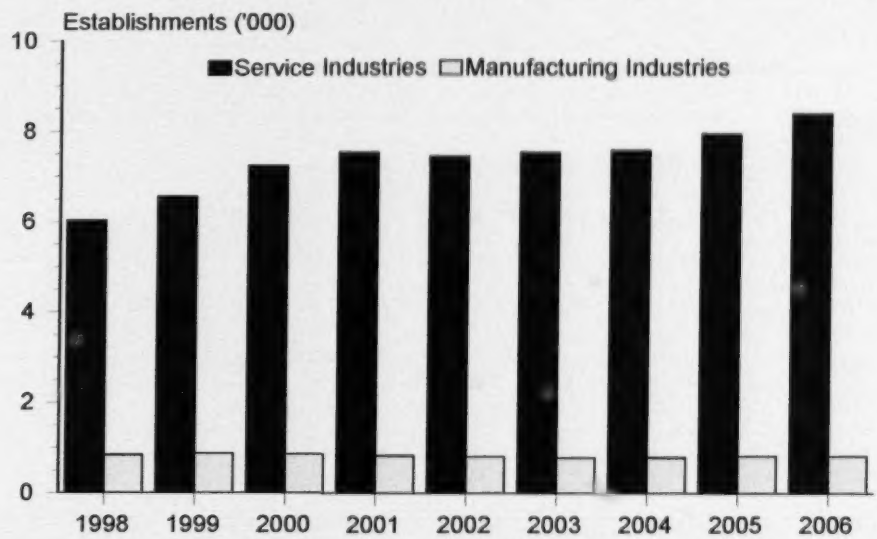
Service industries dominate the count of high technology establishments

The number of high technology **establishments** in BC (excluding those with no employees) grew 5.2% to 9,206 in 2006, the most high tech businesses the province has ever seen. Most of the gain was due to a 5.7% jump in service sector industries, but the number of high tech manufacturing establishments also increased, edging up 0.6%. Service industries dominate high technology in British Columbia as 91% of all high tech establishments are in the service sector. There were 8,386 high tech service sector establishments in the province in 2006 and an additional 820 in high tech manufacturing industries.

An **establishment** is the smallest accounting unit within a firm that can report certain financial data. A single company may contain a number of establishments. To be included in the tabulations, the establishment must have paid employees; owner-operated firms with no paid employees are not included.

About 91% of high tech establishments in BC are in service industries

Figure 4



With 35% of high technology establishments, computer and related services are the largest component of British Columbia's high tech sector. "Other services" (22%) and engineering services (21%) are the next two largest high tech industry groups. Within "other services," environmental and technical consulting industries are the

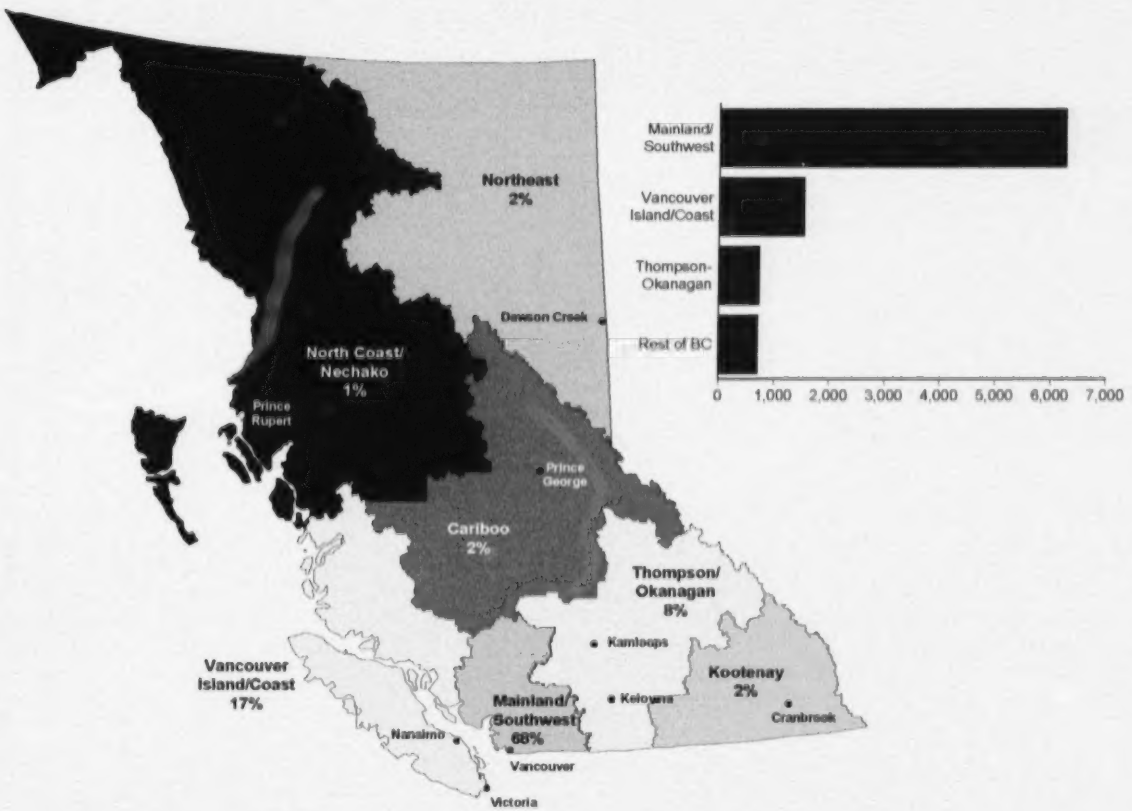
largest component, making up over half of the establishments in the "other services" industry group.[9]

High tech establishments are located where the people are

As one would expect, high technology establishments tend to be located in the most populous areas of the province. In 2006, over two-thirds (68%) of high technology establishments in British Columbia were located in the Mainland/Southwest Development Region (which includes Greater Vancouver). Most of the remaining high tech businesses were situated in either Vancouver Island/Coast (17%) or Thompson-Okanagan (8%).

Over two-thirds of high tech establishments are in the Mainland/Southwest, 2006

Figure 5



Other than Nechako (-3.4%), all other regions of the province experienced growth in the number of high tech establishments be-

[9] Note that there is a data break between 2005 and 2006 for the "Telecommunications" and "Computer and related services" industry groups. See the note at the end of Appendix A for details.

tween 2005 and 2006. The highest growth rates were recorded in some of the more sparsely populated regions of the province: Cariboo (+9.6%), Northeast (+9.1%) and North Coast (+8.0%). These rates represent small numbers, but it is still encouraging to see these regional economies diversifying into high tech areas. In terms of actual numbers, most (70%) of the net new high technology establishments formed in British Columbia in 2006 were located in Mainland/Southwest and almost all of these were in Greater Vancouver.

High tech manufacturing industries employ more people

On average, establishments in the service sector tend to have fewer employees compared to those in manufacturing industries. Of businesses with employees, 10% of high tech manufacturers employed more than 50 workers, compared to just 4% of high tech service industries. While just over half (54%) of high tech manufacturing industries (excluding self-employed with no paid help) have less than five employees, over two thirds (68%) of the establishments in the service sector fit this description.

Self-employment[10] in the high tech sector

Some of the high technology industries are ideally suited to self-employment, where the skills, knowledge and energy of the individual are more important than large capital investment. This is borne out by the available data, as 59% of the businesses in BC's high technology sector had no paid employees in 2006. As one would expect, businesses involved in manufacturing are far less likely to be comprised of self-employed individuals with no employees. In 2006, 60% of all high tech service establishments had no employees, compared to only 37% of high tech manufacturing businesses.

Self-employment is widespread in the high technology sector

[10] There is currently no perfect measure of self-employment in the high tech sector available. The figures quoted here are based on a tabulation of the number of establishments with no employee payroll. This approximates the number of self-employed with no employees (those with employees will be counted in the number of establishments discussed earlier). This is only an approximation because the figure may also include companies that hire only contractors, or companies with unpaid family workers. Also, small unincorporated businesses with annual sales of less than $30,000 are not captured. *Note that it would be erroneous to add these establishment counts to the total number of high technology workers reported elsewhere in this report due to the differences in what they are measuring.*

Establishments, 2006

	Without Employees	With Employees
Manufacturing	474	820
Services	12,794	8,386
High Tech Total	**13,268**	**9,206**
BC Total	**182,599**	**167,845**

The proportion of high tech businesses that have no employees is significantly higher than that of the rest of the economy. The proportion of all businesses in the province that had no employees in 2006 was only 52%.

Trade is of vital importance to BC's high technology industry

International trade is an important aspect of the high technology sector, as reflected in the high volume of two-way trade. The domestic market for high technology goods does not have sufficient volume to achieve the economies of scale needed to remain competitive. Therefore, access to international markets is extremely important as it allows BC producers of high tech goods to focus on market niches. At the same time, BC manufacturers do not produce enough of some types of high technology equipment to satisfy the domestic demand from either consumers or the high technology industry itself, and as a result, large volumes of goods are imported into the province.[11]

High tech exports hit six-year high

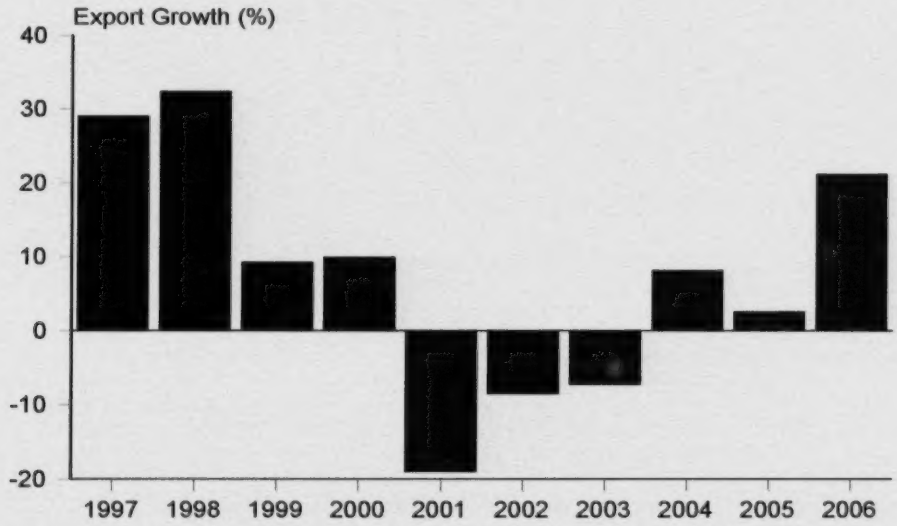
The value of British Columbia's high technology commodity exports soared 21.1% in 2006, climbing to $852.6 million, its highest level since 2000. Shipments of high tech products substantially outpaced the overall value of goods exported from the province, which actually fell 2.0% in 2006. Consequently, the proportion of overall exports comprised of high technology goods climbed from 2.1% in 2005 to 2.6% in 2006, the highest share since 2000, but still a fair bit lower than the peak of 3.0% in 1998.

BC origin high tech exports jumped 21.1% in 2006

[11] High technology goods referred to in this document are based on a list developed by the US Bureau of the Census and modified to fit Canadian conditions. See Appendix B, "Defining High Technology Commodities" for more information.

Figure 6

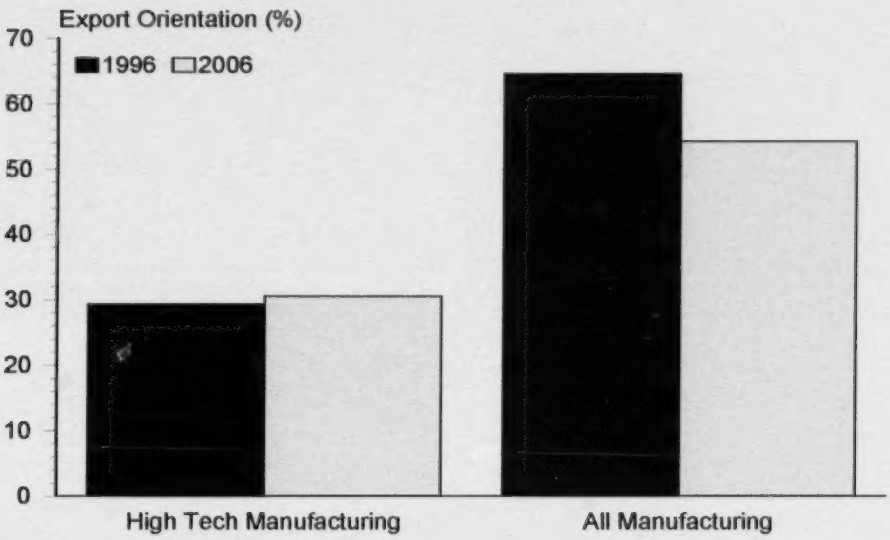
BC's high tech exports experienced robust growth in 2006



Although exports are important to the high tech sector, BC's high technology manufacturing industries tend to be geared more toward the Canadian market, particularly compared to manufacturing in the province in general. In 2006, only 30% of total high tech shipments were exported compared to 54% of manufactured goods overall. The gap was even wider a decade earlier, but in the last several years, the proportion of BC's manufactured goods that are exported has been falling.

Figure 7

A smaller portion of high technology products are exported compared to total manufacturing



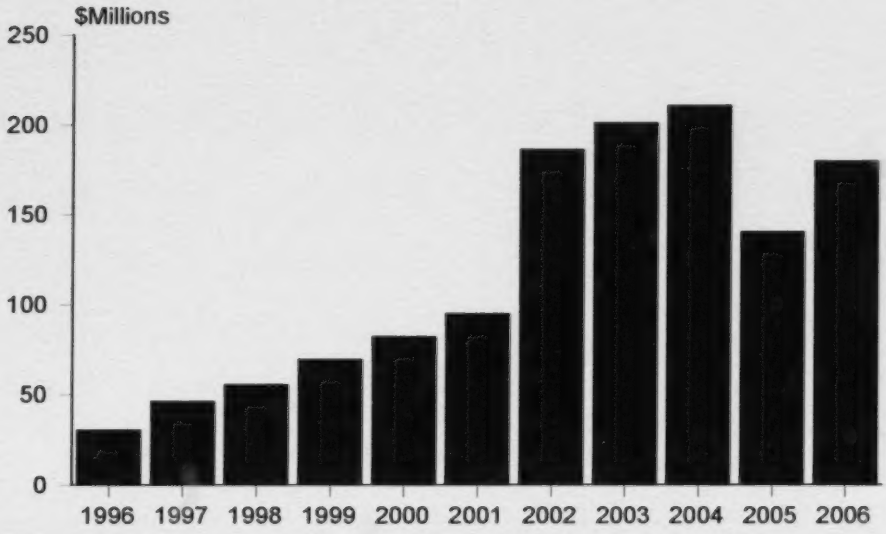
Export growth concentrated in specific commodity groups

Most of the growth in high tech exports was concentrated in just a few commodity groups.[12] The top three commodity groups in terms of export value each experienced a substantial increase in shipments. International shipments of computers and telecommunications equipment, the largest category of advanced technology product exports from BC, climbed 20.8% to over $344 million, the highest level since 1999, but still well below the peak of $443 million exported in 1998. Second-ranked life sciences rebounded from a sharp decline a year earlier with a 28.0% increase, while exports of aerospace products soared 52.6% mostly on the strength of a lift in shipments of aircraft and parts to the United States. Computer integrated manufactured products are the other major group of high tech exports from British Columbia and shipments of these goods slipped 3.1% in 2006 after having experienced substantial growth in the previous three years.

Exports of life sciences products rebounded in 2006

Exports of life sciences products regained some of the ground lost in 2005

Figure 8



Exports of opto-electronic goods and material design products both increased for a second straight year following four consecutive years of decline, but in both cases, values shipped in 2006 are still well below peak levels reached in 2000. In the case of opto-electronic goods, large shipments of photosensitive semiconductor devices, photovoltaic cells and light emitting diodes, and other optical devices, appliances and instruments boosted exports for a few

[12] For information on high technology commodity groups, see Appendix B.

years, but those increases appear to be due to a short-term lift in demand for those products. The substantial jump in exports of material design goods that occurred from 1998 through 2001 was due to large shipments of optical fibre products. With the exception of that short period, British Columbia has not been a large exporter of material design goods.

BC high technology exports by commodity group - 2006

	$ millions	% change
Computers and Telecommunications	344.3	20.8
Life Sciences	179.4	28.0
Aerospace	167.2	52.6
Computer Integrated Manufacturing	101.0	-3.1
Opto-Electronics	37.1	4.1
Electronics	14.1	-8.4
Biotechnology	7.2	-8.5
Material Design	2.1	13.5
Weapons and Nuclear	0.1	-96.5
Total	**852.6**	**21.1**

The US is the primary destination for BC high tech exports

Similar to exports in general, the majority of exports of BC origin high technology goods are destined for the United States. British Columbia exported $587 million worth of high tech products to the United States in 2006, or 69% of all high tech goods exported from the province. This is significantly higher than the proportion of total commodity exports from BC that were shipped to the United States as only 61% of BC's total goods exports were US-bound in 2006. However, the share of BC's high technology exports headed to the United States has slipped in recent years. As recently as 2002, over 80% of BC's high tech goods went to the United States.

The US was the destination of 69% of BC high tech exports

After dropping 4.5% in 2005, exports of high tech goods to the United States rose 20.7% in 2006. Shipments to the European Union[13] climbed 51.8%, including a 140.0% jump in exports to Italy. The increase in shipments to Italy was mainly due to a substantial rise in exports of artificial body parts and was enough to vault Italy ahead of five other countries to place a distant second to the United States as a destination for high tech exports from British Columbia. Exports to Belgium soared 387.8% as a result of a large increase in

[13] Note that the data for the European Union have been restated to reflect the membership as of January 1, 2007. The data have been revised for the entire time series.

shipments of computer products, placing it fourth just behind Japan. High tech commodity exports to Pacific Rim countries actually fell in 2006, slipping 3.8%, mainly due to slumping shipments to Hong Kong (-34.0%) and Mainland China (-24.1%). China slipped from second to fifth as a destination for BC high tech exports. South Korea was the only major Asian destination to see an increase in exports of high tech goods from BC (+30.3%).

BC high technology exports by destination - 2006

	$ millions	% change
United States	586.7	20.7
European Union	106.6	51.8
Italy	22.5	140.0
Belgium	19.2	387.8
United Kingdom	17.0	10.4
Pacific Rim	93.7	-3.8
Japan	19.7	-1.5
Mainland China	17.6	-24.1
South Korea	10.6	30.3
Rest of the world	65.6	30.5
Total	**852.6**	**21.1**

Airfreight has become the most common mode of transport for high technology goods exported from BC

Notwithstanding the small decline in 2006, the growth in exports to countries of the Pacific Rim over the last several years has resulted in a slight shift in the choice of mode of transport for high technology goods. Airfreight has supplanted transport over land by truck or rail as the most popular method for moving high technology goods out of British Columbia to international destinations. Just over half (51%) of all BC high tech exports were transported by air in 2006, while the next most significant mode of transport was over land by truck or rail (48%). Just over 1% of BC's high tech goods were shipped by sea.

The destination of the goods is a significant determinant of the mode of transport. The large majority of high tech goods shipped to the United States travel over land (68%), whereas merchandise exported to most other countries is almost exclusively transported by air (93%).[14]

[14] Note that the shipments by land to destinations other than the United States are not all destined for Mexico. Goods destined for overseas destinations may leave BC by truck or rail to points of departure in the United States where they are loaded onto ships or planes for the remainder of their journey.

BC high technology exports by destination and mode of transport - 2006

	Mode of Transport	$ millions	% of region	% of total high tech exports
United States	Land	401.3	68.4	47.1
	Sea	0.0	0.0	0.0
	Air	185.4	31.6	21.7
	Total	*586.7*	*100.0*	*68.8*
All other countries	Land	5.8	2.2	0.7
	Sea	11.6	4.4	1.4
	Air	284.4	93.5	29.1
	Total	*265.8*	*100.0*	*31.2*
Total	Land	407.1	47.7	47.7
	Sea	11.6	1.4	1.4
	Air	433.8	50.9	50.9
	Total	*852.6*	*100.0*	*100.0*

Imports of high technology goods increased in 2006

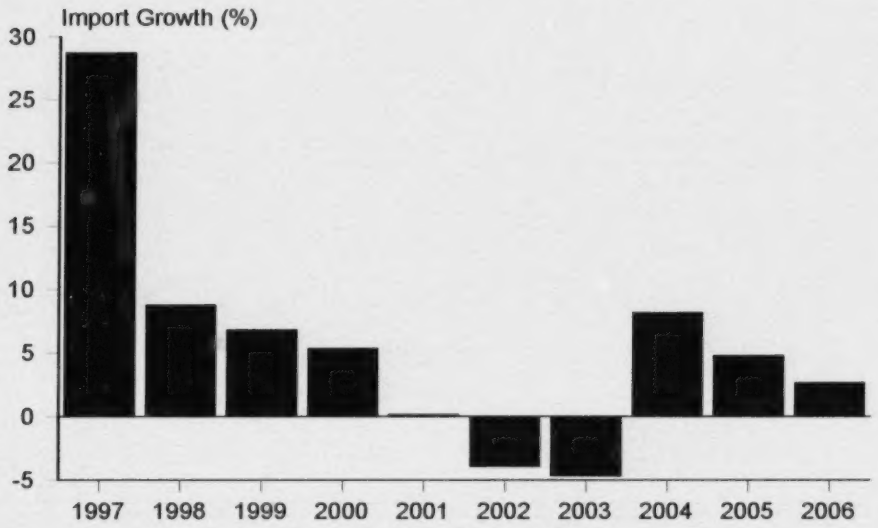
Imports of high technology goods into British Columbia expanded for the third straight year, albeit at a far more modest pace than exports. Normally BC's high technology imports tend to follow a trend similar to high tech exports because a significant amount of high tech goods imported into the province are used as inputs into BC's own high technology manufacturing. As a result, when demand for domestically produced manufactured high tech goods is down, the demand for input goods imported into the province is also muted. This pattern was certainly evident in the previous few years as imports were declining at the same time as exports, and their subsequent rebound also followed the trend of exports.

The value of high tech imports edged up 2.6% in 2006, despite a 10.1% drop in shipments from the United States. This is the sixth consecutive decline in imports of high tech goods from the United States. Much of the reduction in shipments from the US has been offset by the strong growth in imports from Mainland China. High tech goods imported into BC from China have seen double-digit growth in each year since at least 1990, the earliest year for which data is available. A large portion of the imports from China are consumer goods such as portable computers and cellular telephones, which suggests that at least some of the growth in imports is consumer-driven and not solely due to the demand created by the domestic high tech sector.

Mainland China is a growing source for BC imports of high tech goods

Imports of high technology products into British Columbia increased in 2006

Figure 9



There is far more diversification in terms of origins of high tech imports compared to destinations of exports, but just as the United States is the most significant destination for BC high tech exports, it is also the largest origin of BC imports of high technology, although not nearly as dominant. Approximately 35% of imports of high technology products into British Columbia originated in the United States in 2006, amounting to $1,665 million. Mainland China was the origin of $902 million, or 19% of BC's high tech imports, ranking it second. Altogether, countries in the Pacific Rim were the source of 40% of BC's tech imports, surpassing the United States for the first time. Mexico was the origin of almost 10%, or $473 million worth of high tech goods shipped to British Columbia, which was more than all the countries of the European Union combined (9%, or $444 million).

British Columbia imported over five and a half times the value of high tech goods than it exported in 2006. As with exports, computer and telecommunications goods are by far the largest category of high technology imports, comprising well over half (59%) of high tech imports into the province in 2006. The $2.8 billion in imports of these goods alone was over three times the value of all high tech exports. The value of imports of second-ranked life sciences commodities was less than a fifth that of computers and telecommunications goods, at $513 million. Imports of aerospace (-4.7%) and electronics (-7.1%) products fell in 2006, but imports of opto-electronics jumped 57.0% and have more than doubled in value in just two years.

BC high technology imports by commodity group - 2006

	$ millions	% change
Computers and Telecommunications	2,825.6	1.5
Life Sciences	513.5	3.1
Aerospace	465.5	-4.7
Electronics	394.1	-7.1
Opto-Electronics	293.2	57.0
Computer Integrated Manufacturing	180.1	-1.6
Biotechnology	50.2	23.9
Weapons and Nuclear	26.4	29.2
Material Design	25.0	-1.5
Total	4,773.7	2.6

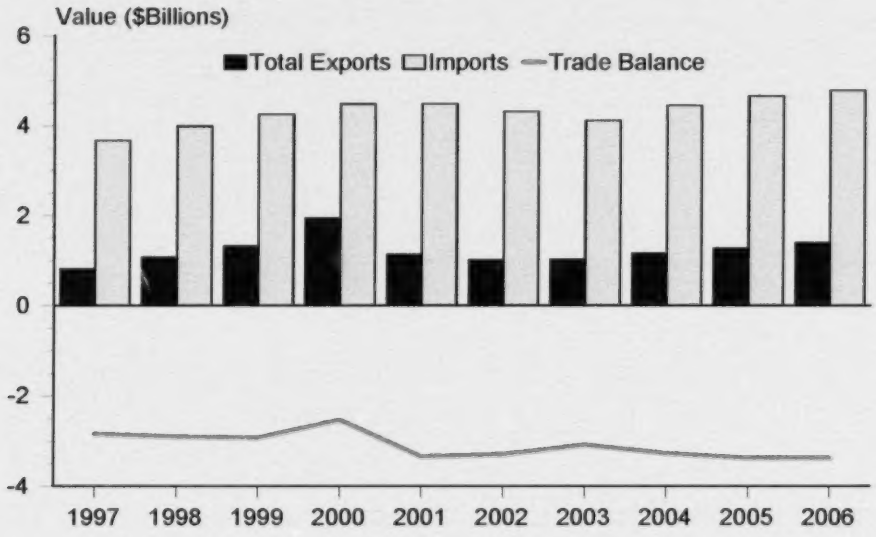
BC's high tech trade deficit remains flat in 2006

BC has a $3.4 billion trade deficit in high tech goods

British Columbia imports substantially more high technology goods than it exports and, as a result, the province runs a trade deficit in these commodities. The change in the value of exports in 2006 was more or less matched by the change in the value of imports such that the balance of trade in high tech goods remained virtually unchanged for British Columbia. The trade deficit in high tech products remained at approximately $3.4 billion.

Figure 10

BC's imports far more high tech goods than it exports



The rise in imports from Mainland China has driven up BC's trade deficit with that country and it now ranks as the largest deficit at $869 million. BC's high tech trade deficit with the United States fell dramatically from $1,120 million in 2005 to $850 million in 2006 as a

result of rising exports and concurrent falling imports. The large deficit is in stark contrast to commodity trade as a whole, where BC has a substantial trade surplus with the US. After the United States and Mainland China, the next largest deficit is with Mexico, at $462 million, which is almost twice the combined deficit with all countries of the European Union ($247 million). BC trades very few high tech goods to Mexico, but imports a large amount, accounting for the substantial deficit.

The trade deficit spans across all commodity groups. As one might expect, the largest deficits are for goods with the highest volumes of trade. The trade deficit for computers and telecommunications alone is almost three times the value of all BC high tech commodity exports combined.

BC balance of trade in high technology goods by commodity group - 2006

	$ millions
Material Design	-21.7
Weapons and Nuclear	-25.6
Biotechnology	-43.0
Electronics	-49.3
Computer Integrated Manufacturing	-64.9
Aerospace	-221.3
Opto-Electronics	-252.1
Life Sciences	-327.6
Computers and Telecommunications	-2,373.3
Total	**-3,378.6**

Robust growth for exports of high tech services in 2006

Service exports are generally more difficult to measure compared to exports of goods. Some service exports take place when BC-based professionals, such as engineers or software programmers, work for a period of time outside the province. Service exports also occur when, for example, an engineering firm produces a study in its BC office for an overseas client or when a software developer creates a new program that is "shipped" on-line to a client in another country.

Computer and related services are the most significant high tech service exports from British Columbia, comprising 60% of the total. Exports of these services were valued at $1.6 billion in 2006, 11.2% higher than a year earlier. This increase helped propel overall BC high tech service exports up 8.7% in 2006. Exports of engineering services also saw a large jump, climbing 11.9%, while tele-

BC high tech service exports jumped 8.7% in 2006 to $2.6 billion

communications and related (+4.8%) and "other services" (+6.2%) industries also increased their service exports.

The only industry group to see a decline in service exports was motion picture production and post-production, where exports dropped 5.8% as a result of a reduction in feature film production by foreign film-makers. The industry has been combating the rise in the Canadian dollar and although tax credits available to foreign film-makers shooting in the province were expanded in 2005, which helped boost production, other competing jurisdictions have started offering similar incentives. This has made it more difficult for BC to attract the big budget features, particularly given the reduction in the exchange rate advantage. There was some shift away from film and toward television in 2006 and this offset some of the loss of feature film production. Most of the decline in foreign film and television production was offset by an increase in domestic production.

The high technology sector in British Columbia exports far more services than goods. In 2006, the value of high tech service exports was three times that of international shipments of high tech goods. This is in contrast to Canada as a whole, for which high tech commodity exports are more than twice the value of exports of high technology services. Canada's high tech manufacturing is concentrated mostly in Quebec and Ontario and a large percentage of these goods are produced for export, which is one of the reasons for the greater emphasis on goods exports for Canada's high tech sector as opposed to the domination of service exports in British Columbia.

The high tech service sector in British Columbia and the rest of Canada faces challenges from countries such as India, China and Russia, which are popular locations for offshoring of information technology (IT) jobs. The lower cost of labour in these countries offers potential savings for companies that are able to contract out work such as computer programming and call centre support services. However, Canada is also one of the top countries in the world in terms of attracting "offshore" service work and offers some advantages that are not available in some of these other markets. Although Canada may be at a disadvantage compared to some of its competitors in terms of compensation costs, it still compares favourably to the United States and most Western European countries. Canada's low-risk environment, well-established infrastructure and world class education system are attractive qualities for a company looking for offshore locations for service work and often outweigh cost considerations.

BC's High Technology Industry in Context

While it is useful to examine the high technology industry's importance relative to other industries within British Columbia and to look at trends and compare the industry's performance today to what it was a year ago or a decade earlier, one cannot really judge the size and scope of BC's high tech sector without comparing it to high tech in other jurisdictions. When it comes to high technology in Canada, there are four provinces that have significant sectors that stand above the rest: Ontario, Quebec, Alberta and British Columbia. For most of the economic indicators, British Columbia's high tech sector ranks fourth among those provinces.

BC ranks fourth in the country in high technology GDP

At $38.5 billion, Ontario generated approximately 43% of Canada's high technology GDP in 2006. Quebec's high tech sector generated $22.9 billion in output, ranking it second. Alberta and BC have been alternating between third and fourth over the last several years, but in 2006, Alberta's $10.0 billion in high tech GDP edged out BC's $9.4 billion. The output from BC's high tech sector comprised just under 11% of total Canadian high tech GDP in 2006.

BC ranks fourth in Canada in terms of GDP generated by high tech

The majority of output from the Canadian high tech sector is derived from the service sector. In 2006, 71% of Canadian high tech GDP was generated by services. Both British Columbia (82%) and Alberta (90%) exceeded the Canadian average in terms of proportion of high tech GDP produced by the service sector, while Ontario's service sector was responsible for a slightly smaller share of the province's high tech output (69%). Manufacturing plays a much more significant role in Quebec's high technology sector and, as a result, services generate only 55% of the province's high tech output. Quebec's large aerospace industry is part of the reason for the higher dependence on manufacturing and significant production of pharmaceuticals is also a factor.

In terms of GDP growth, Alberta led the way in 2006, posting an increase of 11.7%, followed by BC's 5.3% expansion. Growth in high tech GDP in both Quebec (+3.5%) and Ontario (+1.5%) trailed the national average of 4.1%. Alberta's solid increase was driven mainly by high tech services (+12.6%), although the goods sector also saw robust growth (+4.9%). In Quebec, the opposite was true, as the service sector actually experienced a marginal dip (-0.5%) in GDP, while high tech manufacturers boosted their GDP 9.0%.

High tech revenue growth in BC double the national average

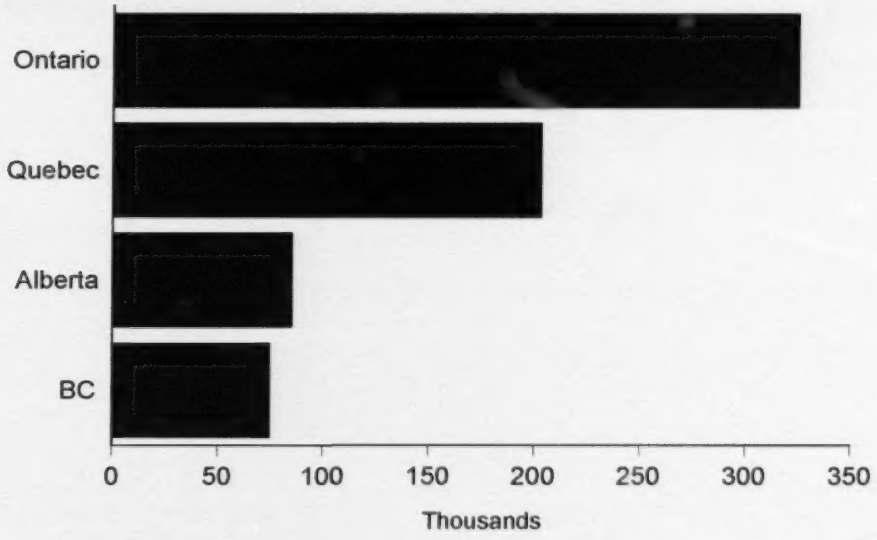
British Columbia's 9.8% growth in high tech revenues was more than twice the Canadian average of 4.8%, but once again, it was Alberta leading the way with a 10.7% jump in revenues. Ontario (+3.9%) and Quebec (+2.6%) also recorded increased high technology revenues. Despite five consecutive years of revenue expansion, British Columbia still ranks fourth among the high tech provinces. British Columbia trails Alberta by roughly $667 million, while Ontario and Quebec rank first and second respectively.

BC has the fourth largest high tech workforce in Canada

The 6.3% rise in high technology employment in British Columbia was far stronger than the 3.6% increase in high tech jobs for Canada as a whole. Once again, Alberta posted the top growth rate with high tech employment climbing 11.9%. Ontario also added to its high tech workforce, with employment rising 3.2%. Quebec's high tech employment remained fairly stable, edging up only 0.2% over the 2005 count.

BC's employment growth was well above the national average

Figure 11 BC ranks fourth in high tech employment in Canada, 2006



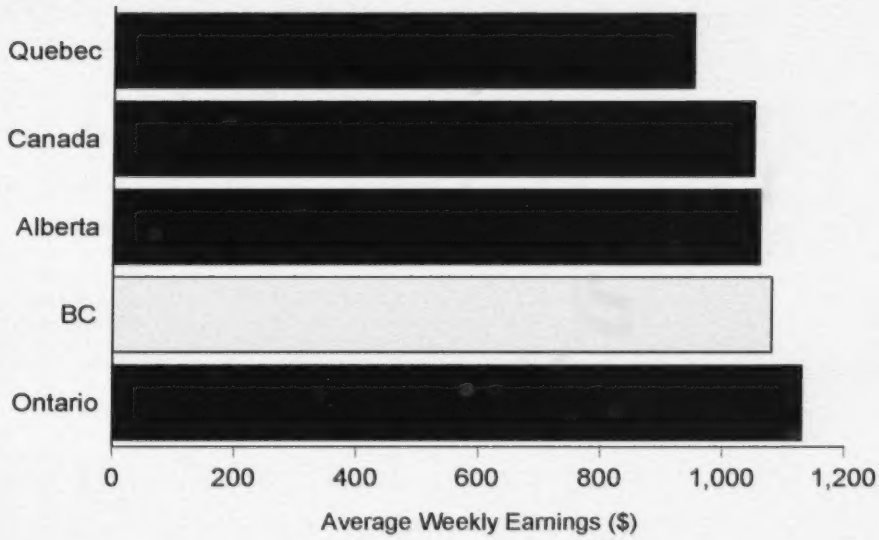
Since 2001, when the number of high tech jobs in Alberta surpassed that of BC, British Columbia has ranked fourth in the country in terms of high tech employment. British Columbia also has the lowest ratio of high tech workers to total provincial employment at 4.1%, compared to 5.4% for Canada as a whole. Quebec, at 6.3%, has the largest share of its workforce in the high tech sector, followed by Ontario (6.0%) and Alberta (5.1%). British Columbia's

share of Canada's high technology employment is just under 10%, which is well below the province's share of total Canadian employment (13%). Over two-thirds of high technology employees reside in Ontario (43%) and Quebec (27%). Alberta is home to 11% of Canada's high tech workers.

Earnings of high tech workers in BC above national average

All the high tech provinces experienced wage inflation in the high technology sector in 2006. Across the country, average weekly earnings averaged an increase of 4.3%, to $1,050. Wages in British Columbia rose slower (+3.3%) than the national average, but BC high tech workers still earned more, on average ($1,080 per week). Ontario, the province with the highest average weekly earnings ($1,130), experienced the slowest growth in wages (+2.9%). Quebec wages, the lowest in the country ($950), gained some ground with the highest annual change (+6.3%), while high tech workers in Alberta saw an average increase of 4.2% in average weekly earnings ($1,060).

BC high technology average earnings exceeded the national average in 2006 **Figure 12**



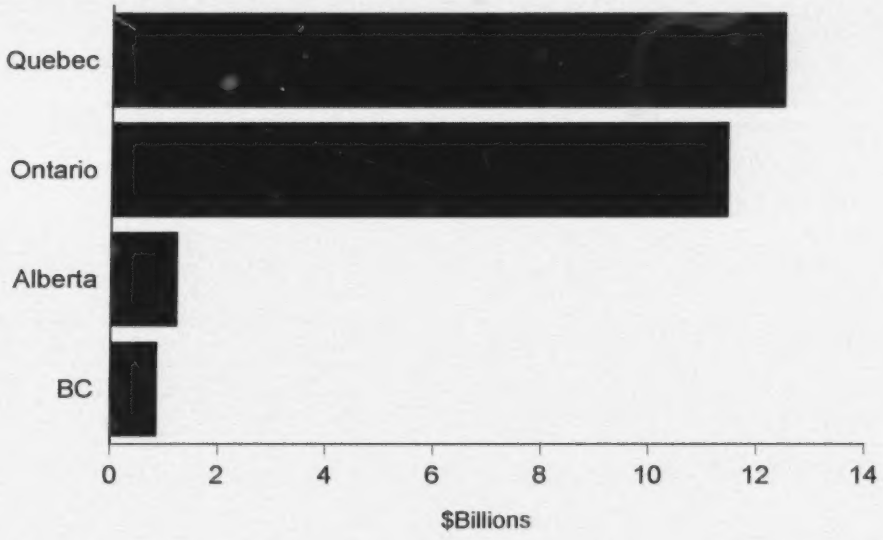
BC has top rate of growth in high tech commodity exports

Exports of high tech goods from British Columbia are relatively small compared to Canada's manufacturing hubs of Quebec and Ontario, which is not very surprising given the differences in the size of the economies, but BC high tech exports also lag those of Alberta. The province with the most high technology commodity

exports is Quebec, which shipped $12.5 billion worth of goods in 2006. Approximately 18% of Quebec's commodity exports in 2006 were high technology products. The bulk of these (72%) were produced by Quebec's world-class aerospace industry.

Just over 6% of Ontario's commodity exports consisted of high tech goods, similar to the Canadian average. Ontario shipped $11.4 billion worth of high tech products to international destinations in 2006, ranking it second behind Quebec. Together these two provinces were the source of 89% of Canada's high technology commodity exports. Alberta ($1.2 billion) and BC ($0.9 billion) were small exporters by comparison. High technology also made up a much smaller portion of each province's total commodity exports. Just under 3% of BC's international shipments were comprised of high tech goods, while just over 1% of Alberta's exports were high tech products as the energy sector was the dominant exporter in that province.

Figure 13 **BC's exports of high tech goods are relatively small, 2006**



However, in terms of growth, BC led all provinces with its impressive 21.1% rise in high tech exports, followed closely by Alberta, at 19.7%. For Alberta, it was the first increase in the value of high tech exports in six years and despite the large jump in 2006, they are still only about a quarter the value of exports in the peak year of 2000. Ontario's high tech sector experienced more modest growth, with an increase of 4.9% over 2005. However, high tech exports from Quebec slumped 8.3%, which in turn drove down overall Canadian high tech shipments (-0.3%). A sharp decline in shipments of integrated circuits was responsible for most of the downturn.

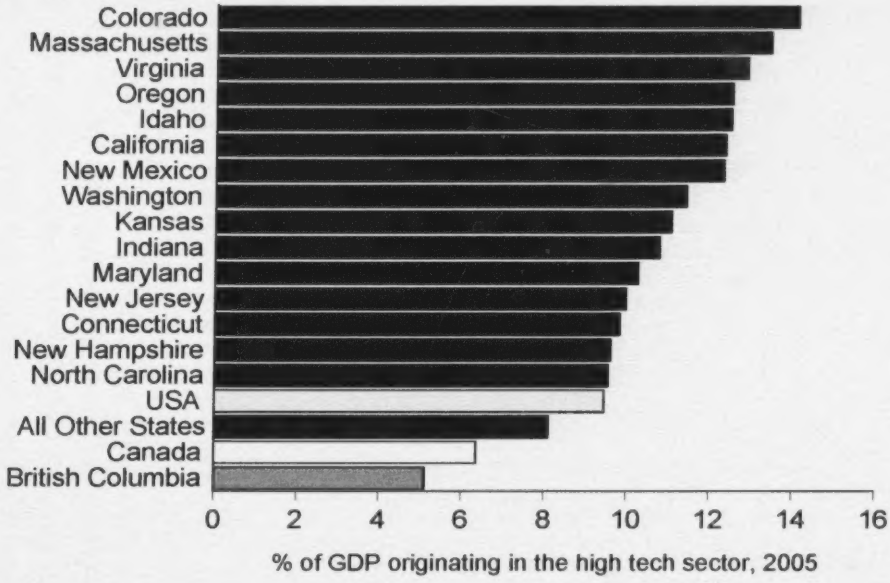
BC had the highest rate of growth in high tech exports

High technology plays a far bigger role in the United States

High technology has a far more significant presence in the United States compared to Canada. High technology industries generated just over 9% of GDP in the United States in 2006, or slightly more than $1.2 trillion.[15] By comparison, high tech comprised just over 6% of Canada's GDP and Canadian high tech output was about 6% of the US total. Among the states, Colorado is the most dependent on high technology with that sector accounting for 14% of the state's GDP in 2005.[16] Colorado is home to a large telecommunications hub and has significant computer services and computer manufacturing industries.

High tech industries play a significant role in the economies of many US states

Figure 14



However, in terms of total size, California has far and away the largest high tech sector in the United States, generating $241.8 billion in GDP in 2005, or 17% of the nation's total high tech GDP. High technology accounted for just over 12% of the state's GDP, driven by the computer industry in Silicon Valley, the large motion picture industry and a significant telecommunications presence.

[15] All dollar figures for the United States have been restated in Canadian currency to allow direct comparison with comparable Canadian figures. An annual average of the Canada/US exchange rate was used to perform this conversion. All GDP figures for the US are in current dollars and comparisons with Canada and the provinces are made using current dollar figures.

[16] GDP data by state is not yet available for 2006.

The GDP from California's high tech sector alone was three times that of all high tech output in Canada as a whole.

Two of the other states sharing BC's time zone also have well-developed high tech sectors. Just over 12% of Oregon's GDP was produced by its high tech sector in 2005, which may come as a surprise to those who see Oregon as mainly a producer of lumber, but high technology is prominent in the state's manufacturing industries. Portland is home to the factories of high tech giants such as Intel and Hewlett-Packard. In Washington State, high technology generates 11% of the state's GDP. The largest industry in the high tech sector in Washington is computer software publishing, led, of course, by Microsoft. Idaho, another state that borders British Columbia, isn't just about potatoes any more. It had just over 12% of its GDP generated by high technology. High tech has become a critical part of Idaho's manufacturing sector with companies such as Hewlett-Packard, Micron Technology and AMI Semiconductor.

All in all, in 2005, there were at least 35 states where high tech contributed more to GDP than in British Columbia. Even in Quebec, where high tech generated 8.1% of GDP in 2005, the province ranked below 21 states.

A relatively greater percentage of Americans are employed in high technology industries

Approximately 5.9% of American employees worked in high technology industries in 2006.[17] The percentage of employees in high tech industries varied from a high of 9.3% for Massachusetts to a low of 2.6% in Wyoming. Washington (9.1%) and California (8.8%) ranked just behind Massachusetts.

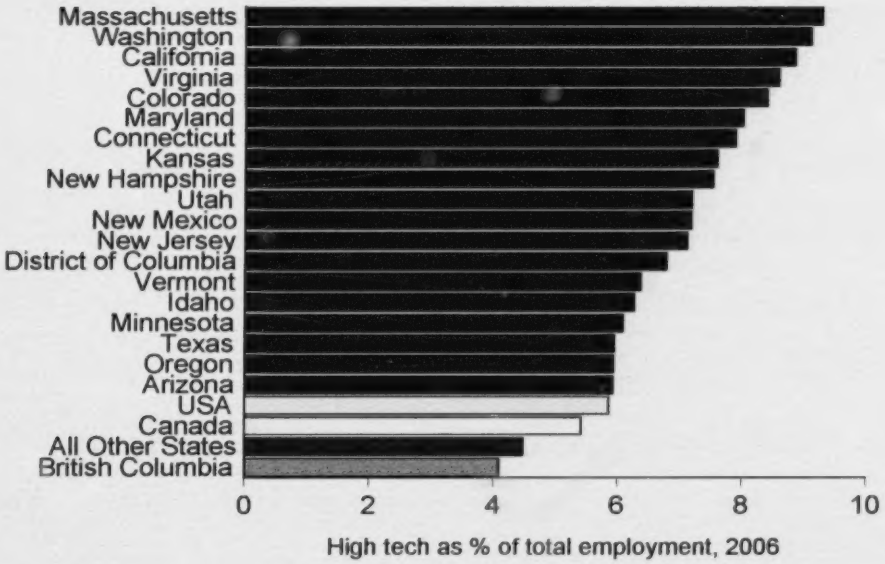
Canada's ratio of high tech to total employment is reasonably comparable to the overall figure for the United States, at 5.4%. At 4.1% of total employment, British Columbia's high tech sector ranked below 32 states in terms of importance of the sector as an employer.[18] Quebec, with 6.3% of employment generated by high technology, the highest rate in Canada, ranked just behind the District of Columbia, which placed 13th in the United States.

[17] The employment data used in this report comes from an employer survey so self-employed workers are excluded.

[18] For ease of reporting, the District of Columbia is counted as a state.

Massachusetts has the largest share of employment comprised of high technology workers

Figure 15



There were a total of 7.8 million people employed in the United States' high technology sector in 2006, an increase of 2.6% from a year earlier. California was home to almost 1.4 million high tech workers, or about 17% of the national total. Computer manufacturing and software services were the largest employers in the state. California's high tech employment was more than double that of second-ranked Texas, which had under 0.6 million employees in the sector in 2006.

Compared to Canada, manufacturing plays a far more significant role in the high technology sector in the United States. In 2006, almost 34% of all high tech jobs in the United States were in manufacturing industries, compared to only 27% for Canada and 18% for British Columbia. There were seven states where manufacturing industries employed over half of the state's high tech workforce, topped by Indiana and Vermont (each 57%). At the other end of the scale, high technology employment in the District of Columbia, Alaska and Hawaii was almost all in the service sector with less than 3% of high tech workers employed in manufacturing.

Those Americans that work in the high technology sector tend to earn far higher wages compared to their Canadian peers. In 2006, the average weekly wage for high tech workers in the United States was $1,670, ranging from $1,002 in South Dakota to $2,048 in California. By comparison, high tech

American high tech workers earn more, on average, than their Canadian counterparts

workers in Canada earned $1,050, on average, and employees in British Columbia took in $1,080 in an average week, placing the province well behind most states in terms of compensation for high technology employees.

The United States exports and imports relatively more high tech goods compared to Canada

The United States exported $237.1 billion worth of high tech commodities in 2006, which represented about 22% of total US domestic exports. By comparison, in Canada less than 7% of the country's commodity exports consisted of high technology products. In British Columbia, slightly less than 3% of total exports were high tech goods. Quebec is the only province that has a ratio that approaches that of the United States as high technology accounted for 18% of Quebec's total domestic exports in 2006.

The discrepancy is not nearly as large for commodity imports as just under 16% of all imports into the US are high technology goods, compared to approximately 12% of imports into Canada.

Domestic exports of high technology goods from the United States (denominated in Canadian dollars) recovered from a slump in 2005 with a 10.2% increase in 2006. Imports of high tech goods also rose, climbing 4.8% to $329.9 billion. As recently as 1997, the United States had a surplus in trade of high tech goods of over $45 billion, but strong growth in imports coupled with very little increase to exports has put American trade in high technology goods into a deficit position for the last five years. Although the strong export growth in 2006 brought down the deficit somewhat, it still stood at over $43 billion.[19]

High technology sector in BC is small, but growing

It is clear after examining the size of the tech sector in the US that British Columbia's high technology sector is still small. However, the sector has been growing and is becoming a more integral part of the provincial economy and while the sector as a whole may not rank prominently compared to other high tech jurisdictions, BC is home to some high tech clusters, such as fuel cells and motion picture production, that are world class and, in some cases, world leaders. Developments such as the new masters program in digital media offered by BC educational institutions and the new Micro-

[19] Note that the balance of trade is calculated by taking the difference of total exports (including re-exports) and subtracting imports. The $237.1 billion export figure for 2006 excludes re-exports, which were $49.4 billion.

soft facility planned for Vancouver should provide a further boost for the province's tech sector. Given the significance of high technology products in today's world and the combination of lucrative revenues and well-paid employment offered by the sector, there is little doubt that high technology will continue to attract attention in British Columbia and elsewhere.

Detailed Tables

The tables in this section include a notation of "r" to indicate data that have been revised from previous editions and "p" to indicate that the data are preliminary. Most data for 2006 are denoted as preliminary, which should not be construed as meaning that there are problems with the data, but rather that they are based on information that itself is preliminary and therefore are subject to greater revision than data for previous years.

List of Tables

Table 1. GDP (Constant Dollar) at Basic Prices, by Industry, 1997-2006 44

Table 2. GDP (Current Dollar) at Basic Prices, by Industry, 1997-2006 45

Table 3. GDP at basic prices, Selected Activities, 1997-2006 46

Table 4. High Technology GDP (Constant Dollar) at Basic Prices, by Province, 1997-2006 47

Table 5. High Technology GDP (Current Dollar) at Basic Prices, by Province and the USA, 1997-2006 48

Table 6. High Technology GDP (current dollar) for Selected States, 1997-2006 49

Table 7. High Technology Sector Revenues, 1997-2006 50

Table 8. High Tech Sector Revenues, by Province and the USA, 1997-2006 50

Table 9. High Technology Sector Revenues for Selected States, 1997-2006 51

Table 10. High Technology Sector Employment, 1997-2006 52

Table 11. Employment by Industry, British Columbia, 1996-2006 53

Table 12. High Technology Sector Employment, by Province, 1997-2006 54

Table 13. High Tech Sector Employment for Top 20 US States, 1997-2006 55

Table 14. High Technology Sector Wages and Salaries, 1997-2006 56

Table 15. High Technology Sector Average Weekly Earnings, 1997-2006 57

Table 16. High Tech Sector Average Weekly Earnings, by Province, 1997-2006 57

Table 17. High Technology Sector Wages and Salaries for Selected US States, 1997-2006 58

Table 18. High Technology Sector Average Weekly Earnings for Selected US States, 1997-2006 59

Table 19. High Technology Sector Establishments,[1] by Development Region and Regional District, 2003-2006 60

Table 20. High Technology Sector Establishments, by Industry, 1998-2006 61

Table 21. High Technology Sector Establishments, by Industry and Establishment Size, 2006 61

Table 22. Shipments and Exports of BC High Technology Goods and Total Processed Goods, 1996-2006 62

Table 23. Domestic Exports of High Technology Goods, by Destination and Mode of Transport, 1996-2006 63

Table 24. Top 25 High Technology Export Commodities, 2006 64

Table 25. Top 25 High Technology Import Commodities, 2006 64

Table 26. Domestic Exports of High Technology Goods and Total Goods, by Destination 1996-2006 65

Table 27. Imports of High Technology, by Country of Origin, 1996-2006 66

Table 28. Balance of Trade in High Tech Goods, by Country, 1996-2006 66

Table 29. Domestic Exports of High Technology Goods, by Commodity Group, 1996-2006 67

Table 30. Imports of High Tech Goods, by Commodity Group, 1996-2006.....67

Table 31. Balance of Trade in High Technology Goods, by Commodity Group, 1996-2006.....67

Table 32. Domestic Exports of High Technology Goods to the United States, by Commodity Group, 1996-2006.....68

Table 33. Imports of High Technology Goods from the United States, by Commodity Group, 1996-2006.....68

Table 34. Balance of Trade in High Technology Goods with the United States, by Commodity Group, 1996-2006.....68

Table 35. Domestic Exports of High Technology Goods to the Pacific Rim, by Commodity Group, 1996-2006.....69

Table 36. Imports of High Technology Goods from the Pacific Rim, by Commodity Group, 1996-2006.....69

Table 37. Balance of Trade in High Technology Goods with the Pacific Rim, by Commodity Group, 1996-2006.....69

Table 38. Domestic Exports of High Technology Goods to Mainland China, by Commodity Group, 1996-2006.....70

Table 39. Imports of High Technology Goods from Mainland China, by Commodity Group, 1996-2006.....70

Table 40. Balance of Trade in High Technology Goods with Mainland China, by Commodity Group, 1996-2006.....70

Table 41. Domestic Exports of High Technology Goods to Japan, by Commodity Group, 1996-2006.....71

Table 42. Imports of High Technology Goods from Japan, by Commodity Group, 1996-2006.....71

Table 43. Balance of Trade in High Technology Goods with Japan, by Commodity Group, 1996-2006.....71

Table 44. Domestic Exports of High Technology Goods to the European Union, by Commodity Group, 1996-2006.....72

Table 45. Imports of High Technology Goods from the European Union, by Commodity Group, 1996-2006.....72

Table 46. Balance of Trade in High Technology Goods with the European Union, by Commodity Group, 1996-2006.....72

Table 47. Exports of High Technology Services, 1997-2006.....73

Table 48. Domestic Exports of High Tech Goods by Province, 1996-2006.....73

Table 49. Imports of High Technology Goods, Canada and BC, 1996-2006.....74

Table 50. United States High Technology Commodity Trade, 1996-2006.....74

Table 51. High Technology Trade Comparison: United States vs. Canada and BC (in Canadian $), 1996-2006.....74

Table 1. Gross Domestic Product (GDP) (Constant Dollar) at Basic Prices,[1] by Industry, 1997-2006

	1997 $ million									
INDUSTRY	**1997[r]**	**1998[r]**	**1999[r]**	**2000[r]**	**2001[r]**	**2002[r]**	**2003[r]**	**2004[r]**	**2005[r]**	**2006[p]**
Manufacturing	**743**	**818**	**1,076**	**1,917**	**1,696**	**1,288**	**1,409**	**1,564**	**1,543**	**1,728**
Services	**4,362**	**4,678**	**4,904**	**5,343**	**5,543**	**6,184**	**6,670**	**6,867**	**7,412**	**7,703**
Motion picture production & post production	90	102	139	134	150	150	129	118	*	*
Telecommunications	2,408	2,430	2,662	2,874	2,788	3,183	*	*	*	*
Engineering services	1,008	971	872	864	919	878	865	886	1,095	1,215
Computer and related services	712	969	1,053	1,265	1,463	1,617	*	*	*	2,081
Other services	144	207	179	206	222	357	368	372	392	403
High Technology Sector Total	**5,104**	**5,496**	**5,980**	**7,259**	**7,240**	**7,472**	**8,079**	**8,431**	**8,955**	**9,431**
BC Industrial Aggregate	**104,554**	**105,827**	**109,008**	**113,919**	**115,139**	**118,806**	**121,769**	**126,791**	**131,139**	**136,050**

	% change from previous year								
INDUSTRY	**1998[r]**	**1999[r]**	**2000[r]**	**2001[r]**	**2002[r]**	**2003[r]**	**2004[r]**	**2005[r]**	**2006[p]**
Manufacturing	**10.1**	**31.5**	**78.2**	**-11.5**	**-24.1**	**9.4**	**11.0**	**-1.3**	**12.0**
Services	**7.3**	**4.8**	**8.9**	**3.8**	**11.6**	**7.9**	**3.0**	**7.9**	**3.9**
Motion picture production & post production	13.7	35.4	-3.4	12.2	-0.5	-13.9	-8.7	*	*
Telecommunications	0.9	9.5	8.0	-3.0	14.2	*	*	*	*
Engineering services	-3.7	-10.1	-0.9	6.4	-4.4	-1.5	2.3	23.6	11.0
Computer and related services	36.2	8.6	20.2	15.6	10.5	*	*	*	*
Other services	43.9	-13.5	14.9	8.1	60.5	3.2	1.0	5.5	2.8
High Technology Sector Total	**7.7**	**8.8**	**21.4**	**-0.3**	**3.2**	**8.1**	**4.4**	**6.2**	**5.3**
BC Industrial Aggregate	**1.2**	**3.0**	**4.5**	**1.1**	**3.2**	**2.5**	**4.1**	**3.4**	**3.7**

1. Industry-based GDP data are now reported at basic prices. Previously a "factor cost" method of calculation was used. The difference between the basic price and factor cost concepts is that the factor cost estimate includes all subsidies and excludes all indirect taxes.

* Data has been suppressed due to confidentiality requirements.

[r] Revised

[p] Preliminary

Source: BC Stats and Statistics Canada

Table 2. Gross Domestic Product (GDP) (Current Dollar) at Basic Prices,[1] by Industry, 1997-2006

$ million

INDUSTRY	1997[r]	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[p]
Manufacturing	**743**	**734**	**920**	**1,254**	**1,096**	**908**	**919**	**896**	**906**	**954**
Services	**4,362**	**4,694**	**4,614**	**4,988**	**5,180**	**5,787**	**6,370**	**6,637**	**7,001**	**7,619**
Motion picture production & post production	90	118	163	168	186	198	176	120	*	*
Telecommunications	2,408	2,390	2,394	2,482	2,401	2,728	*	*	*	*
Engineering services	1,008	1,008	837	884	964	943	940	972	1,232	1,378
Computer and related services	712	964	1,042	1,231	1,368	1,469	*	*	*	2,468
Other services	144	214	178	224	261	449	475	487	535	568
High Technology Sector Total	**5,104**	**5,428**	**5,534**	**6,242**	**6,275**	**6,695**	**7,289**	**7,533**	**7,907**	**8,573**
BC Industrial Aggregate	**104,562**	**105,904**	**110,806**	**120,756**	**122,772**	**126,764**	**133,444**	**144,424**	**154,871**	**164,924**
High Technology as a % of Total	**4.9**	**5.1**	**5.0**	**5.2**	**5.1**	**5.3**	**5.5**	**5.2**	**5.1**	**5.2**

% change from previous year

INDUSTRY	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[p]
Manufacturing	**-1.1**	**25.3**	**36.4**	**-12.6**	**-17.2**	**1.3**	**-2.5**	**1.1**	**5.3**
Services	**7.6**	**-1.7**	**8.1**	**3.8**	**11.7**	**10.1**	**4.2**	**5.5**	**8.8**
Motion picture production & post production	30.4	38.9	2.8	11.0	6.4	-11.4	-31.9	*	*
Telecommunications	-0.8	0.2	3.6	-3.3	13.6	*	*	*	*
Engineering services	0.0	-17.0	5.6	9.0	-2.1	-0.3	3.4	26.7	11.9
Computer and related services	35.4	8.1	18.1	11.1	7.4	*	*	*	*
Other services	49.0	-16.9	26.0	16.5	72.0	5.7	2.5	9.9	6.3
High Technology Sector Total	**6.3**	**2.0**	**12.8**	**0.5**	**6.7**	**8.9**	**3.4**	**5.0**	**8.4**
BC Industrial Aggregate	**1.3**	**4.6**	**9.0**	**1.7**	**3.3**	**5.3**	**8.2**	**7.2**	**6.5**

1. Industry-based GDP data are now reported at basic prices. Previously a "factor cost" method of calculation was used. The difference between the basic price and factor cost concepts is that the factor cost estimate includes all subsidies and excludes all indirect taxes.

* Data has been suppressed due to confidentiality requirements.

[r] Revised

[p] Preliminary

Source: BC Stats and Statistics Canada

Table 3. Gross Domestic Product (GDP) at basic prices,[1] Selected Activities, 1997-2006

	Chained (1997 $ million)									
	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Goods-producing industries	**27,806**	**27,199**	**28,503**	**30,632**	**30,038**	**30,967**	**31,575**	**33,217**	**34,327**	**35,332**
Agriculture, forestry, fishing and hunting	4,779	4,692	4,536	4,470	4,588	4,542	4,772	5,240	5,331	5,287
Crop and animal production	907	864	930	927	1,084	1,006	1,063	1,072	1,084	1,033
Forestry and logging	3,185	3,203	3,026	2,863	2,872	2,944	3,071	3,645	3,760	3,846
Fishing, hunting and trapping	201	131	101	115	95	115	118	114	106	99
Support activities for agriculture and forestry	486	497	476	550	511	460	498	458	456	424
Mining, oil and gas extraction	2,646	2,804	2,808	2,821	3,586	3,697	3,534	3,526	3,537	3,514
Utilities	2,468	2,534	2,576	2,591	2,024	2,403	2,408	2,368	2,587	2,560
Construction	6,434	5,932	5,718	5,635	5,854	6,153	6,686	7,557	7,956	8,758
Manufacturing	11,479	11,228	12,809	14,954	13,634	13,654	13,751	14,241	14,674	15,031
Food manufacturing	1,016	1,042	1,129	1,257	1,423	1,324	1,250	1,278	1,437	1,483
Wood product manufacturing	3,634	3,579	4,023	4,437	3,642	4,222	4,143	4,579	4,722	4,701
Pulp and paper manufacturing	1,599	1,334	1,887	1,832	1,538	1,639	1,594	1,603	1,550	1,471
Primary and fabricated metal manufacturing	1,195	*	*	*	*	1,403	1,429	1,588	1,684	1,963
Computer and electronic product manufacturing	415	476	742	1,323	1,062	734	776	826	847	965
Service-producing industries	**76,748**	**78,636**	**80,518**	**83,343**	**85,131**	**87,937**	**90,218**	**93,613**	**96,851**	**100,747**
Wholesale trade	4,932	5,329	5,368	5,539	5,628	5,940	6,196	6,648	7,157	7,853
Retail trade	6,050	6,236	6,370	6,707	6,968	7,155	7,369	7,748	8,086	8,562
Transportation and warehousing	6,590	6,679	6,956	7,458	7,344	7,413	7,579	8,148	8,578	8,944
Information and cultural services	3,618	3,827	4,046	4,287	4,389	4,986	5,435	5,591	5,841	5,969
Finance, insurance, real estate, leasing, etc	23,606	23,903	24,630	25,055	25,756	26,765	27,410	28,631	29,868	31,006
Professional, scientific and technical services	4,012	4,485	4,405	4,716	4,820	4,937	5,063	5,178	5,301	5,482
Administration and support, waste mgmt.	2,012	2,047	2,041	1,977	2,067	2,190	2,213	2,319	2,435	2,564
Education	5,406	5,588	5,753	5,887	5,978	6,021	6,099	6,164	6,212	6,341
Health care and social assistance	7,224	7,269	7,340	7,719	7,889	7,933	8,090	8,192	8,239	8,403
Arts, entertainment and recreation	1,128	1,124	1,213	1,224	1,282	1,307	1,327	1,330	1,355	1,419
Accommodation and food services	3,594	3,563	3,543	3,630	3,611	3,653	3,703	3,801	3,839	4,035
Other services	2,812	2,779	2,847	3,010	3,235	3,383	3,502	3,586	3,626	3,755
Public administration	5,764	5,821	6,050	6,236	6,354	6,546	6,615	6,690	6,797	6,961
GDP at basic prices	**104,554**	**105,827**	**109,008**	**113,919**	**115,139**	**118,806**	**121,769**	**126,791**	**131,139**	**136,050**

	% change from previous year								
	1998	1999	2000	2001	2002	2003	2004	2005	2006
Goods-producing industries	**-2.2**	**4.8**	**7.5**	**-1.9**	**3.1**	**2.0**	**5.2**	**3.3**	**2.9**
Agriculture, forestry, fishing and hunting	-1.8	-3.3	-1.5	2.6	-1.0	5.0	9.8	1.7	-0.8
Crop and animal production	-4.8	7.7	-0.4	17.0	-7.3	5.7	0.8	1.2	-4.7
Forestry and logging	0.6	-5.5	-5.4	0.3	2.5	4.3	18.7	3.1	2.3
Fishing, hunting and trapping	-35.0	-23.0	14.5	-17.5	21.0	2.7	-3.1	-6.8	-7.2
Support activities for agriculture and forestry	2.1	-4.1	15.5	-7.0	-10.0	8.2	-7.9	-0.4	-7.1
Mining, oil and gas extraction	6.0	0.2	0.5	27.1	3.1	-4.4	-0.2	0.3	-0.6
Utilities	2.6	1.7	0.6	-21.9	18.7	0.2	-1.7	9.2	-1.0
Construction	-7.8	-3.6	-1.4	3.9	5.1	8.7	13.0	5.3	10.1
Manufacturing	-2.2	14.1	16.7	-8.8	0.1	0.7	3.6	3.0	2.4
Food manufacturing	2.5	8.4	11.3	13.2	-7.0	-5.6	2.2	12.5	3.2
Wood product manufacturing	-1.5	12.4	10.3	-17.9	15.9	-1.9	10.5	3.1	-0.4
Pulp and paper manufacturing	-16.5	41.4	-2.9	-16.1	6.6	-2.7	0.6	-3.3	-5.1
Primary and fabricated metal manufacturing	*	*	*	*	*	1.8	11.2	6.0	16.6
Computer and electronic product manufacturing	14.5	56.0	78.4	-19.8	-30.8	5.7	6.5	2.5	13.9
Service-producing industries	**2.5**	**2.4**	**3.5**	**2.1**	**3.3**	**2.6**	**3.8**	**3.5**	**4.0**
Wholesale trade	8.0	0.7	3.2	1.6	5.5	4.3	7.3	7.7	9.7
Retail trade	3.1	2.1	5.3	3.9	2.7	3.0	5.1	4.4	5.9
Transportation and warehousing	1.4	4.1	7.2	-1.5	0.9	2.2	7.5	5.3	4.3
Information and cultural services	5.8	5.7	5.9	2.4	13.6	9.0	2.9	4.5	2.2
Finance, insurance, real estate, leasing, etc	1.3	3.0	1.7	2.8	3.9	2.4	4.5	4.3	3.8
Professional, scientific and technical services	11.8	-1.8	7.0	2.2	2.4	2.5	2.3	2.4	3.4
Administration and support, waste mgmt.	1.7	-0.3	-3.1	4.5	6.0	1.0	4.8	5.0	5.3
Education	3.4	2.9	2.3	1.6	0.7	1.3	1.1	0.8	2.1
Health care and social assistance	0.6	1.0	5.2	2.2	0.6	2.0	1.3	0.6	2.0
Arts, entertainment and recreation	-0.4	7.9	0.9	4.8	1.9	1.6	0.2	1.9	4.7
Accommodation and food services	-0.9	-0.6	2.5	-0.5	1.2	1.4	2.6	1.0	5.1
Other services	-1.2	2.4	5.7	7.5	4.6	3.5	2.4	1.1	3.5
Public administration	1.0	3.9	3.1	1.9	3.0	1.1	1.1	1.6	2.4
GDP at basic prices	**1.2**	**3.0**	**4.5**	**1.1**	**3.2**	**2.5**	**4.1**	**3.4**	**3.7**

1. Industry-based GDP data are now reported at basic prices. Previously a "factor cost" method of calculation was used. The difference between the basic price and factor cost concepts is that the factor cost estimate includes all subsidies and excludes all indirect taxes.

* Data has been suppressed due to confidentiality requirements.

Source: Statistics Canada

Table 4. High Technology GDP (Constant Dollar) at Basic Prices,[1] by Province, 1997-2006

1997 $ million

Province		1997[r]	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[p]
Canada	Manufacturing	18,018	19,230	24,421	30,543	24,730	22,223	23,272	23,672	24,726	26,096
	Services	32,142	36,289	41,982	46,287	50,384	53,917	56,118	57,912	61,074	63,216
	Total	50,160	55,519	66,402	76,830	75,114	76,141	79,391	81,584	85,800	89,311
British Columbia	Manufacturing	743	818	1,076	1,917	1,696	1,288	1,409	1,564	1,543	1,728
	Services	4,362	4,678	4,904	5,343	5,543	6,184	6,670	6,867	7,412	7,703
	Total	5,104	5,496	5,980	7,259	7,240	7,472	8,079	8,431	8,955	9,431
Alberta	Manufacturing	910	1,041	1,052	1,211	894	851	868	980	991	1,040
	Services	3,992	4,817	5,146	5,718	6,150	6,678	7,194	7,944	7,952	8,953
	Total	4,902	5,857	6,199	6,929	7,044	7,529	8,062	8,923	8,943	9,993
Ontario	Manufacturing	8,765	9,544	11,528	13,624	10,650	10,525	11,100	11,095	11,793	12,033
	Services	13,039	14,715	18,356	20,925	22,969	24,094	24,988	25,959	26,114	26,451
	Total	21,804	24,259	29,885	34,549	33,619	34,619	36,088	37,055	37,906	38,484
Quebec	Manufacturing	6,679	6,879	9,666	11,754	10,176	8,428	8,747	8,986	9,446	10,292
	Services	7,126	8,055	9,266	9,727	10,711	11,482	11,995	12,523	12,667	12,600
	Total	13,805	14,935	18,933	21,481	20,887	19,911	20,742	21,509	22,113	22,892

% change from previous year

Province		1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[p]
Canada	Manufacturing	6.7	27.0	25.1	-19.0	-10.1	4.7	1.7	4.5	5.5
	Services	12.9	15.7	10.3	8.9	7.0	4.1	3.2	5.5	3.5
	Total	10.7	19.6	15.7	-2.2	1.4	4.3	2.8	5.2	4.1
British Columbia	Manufacturing	10.1	31.5	78.2	-11.5	-24.1	9.4	11.0	-1.3	12.0
	Services	7.3	4.8	8.9	3.8	11.6	7.9	3.0	7.9	3.9
	Total	7.7	8.8	21.4	-0.3	3.2	8.1	4.4	6.2	5.3
Alberta	Manufacturing	14.4	1.1	15.1	-26.2	-4.8	2.0	12.9	1.1	4.9
	Services	20.7	6.8	11.1	7.6	8.6	7.7	10.4	0.1	12.6
	Total	19.5	5.8	11.8	1.7	6.9	7.1	10.7	0.2	11.7
Ontario	Manufacturing	8.9	20.8	18.2	-21.8	-1.2	5.5	0.0	6.3	2.0
	Services	12.9	24.8	14.0	9.8	4.9	3.7	3.9	0.6	1.3
	Total	11.3	23.2	15.6	-2.7	3.0	4.2	2.7	2.3	1.5
Quebec	Manufacturing	3.0	40.5	21.6	-13.4	-17.2	3.8	2.7	5.1	9.0
	Services	13.0	15.0	5.0	10.1	7.2	4.5	4.4	1.2	-0.5
	Total	8.2	26.8	13.5	-2.8	-4.7	4.2	3.7	2.8	3.5

1. Industry-based GDP data are now reported at basic prices. Previously a "factor cost" method of calculation was used. The difference between the basic price and factor cost concepts is that the factor cost estimate includes all subsidies and excludes all indirect taxes.

[r] Revised

[p] Preliminary

Source: BC Stats

Table 5. High Technology GDP (Current Dollar) at Basic Prices,[1] by Province and the USA, 1997-2006

Cdn $ million

Region		1997[r]	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[p]
Canada	Manufacturing	18,018	18,109	22,750	26,066	21,973	20,393	21,346	21,421	21,348	22,350
	Services	32,142	36,493	40,118	43,561	46,974	50,456	53,444	56,721	59,913	63,698
	Total	50,160	54,602	62,867	69,627	68,947	70,848	74,790	78,142	81,261	86,049
British Columbia	Manufacturing	743	734	920	1,254	1,096	908	919	896	906	954
	Services	4,362	4,694	4,614	4,988	5,180	5,787	6,370	6,637	7,001	7,619
	Total	5,104	5,428	5,534	6,242	6,275	6,695	7,289	7,533	7,907	8,573
Alberta	Manufacturing	910	1,069	1,135	1,549	946	885	905	1,006	1,035	1,089
	Services	3,992	4,823	5,047	5,389	5,952	6,304	6,888	7,621	7,859	9,086
	Total	4,902	5,892	6,182	6,939	6,897	7,189	7,793	8,627	8,895	10,175
Ontario	Manufacturing	8,765	9,064	9,595	10,342	9,281	9,193	9,781	9,676	9,940	10,347
	Services	13,039	14,787	17,531	19,786	21,446	22,634	23,715	25,625	26,304	27,422
	Total	21,804	23,852	27,126	30,128	30,726	31,827	33,496	35,301	36,244	37,769
Quebec	Manufacturing	6,679	6,334	9,997	11,374	9,689	8,426	8,662	8,734	8,432	8,817
	Services	7,126	8,130	8,815	9,132	9,888	10,756	11,146	11,632	12,081	12,666
	Total	13,805	14,464	18,812	20,506	19,577	19,182	19,808	20,366	20,513	21,483
United States[2]	Manufacturing	413,573	490,112	493,341	531,017	499,841	491,976	442,755	424,681	414,980	410,125
	Services	669,961	809,337	912,574	991,365	1,078,617	1,111,584	1,008,056	1,011,117	1,001,965	991,762
	Total	1,083,533	1,299,449	1,405,915	1,522,382	1,578,458	1,603,560	1,450,811	1,435,798	1,416,944	1,401,887

% change from previous year

Region		1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[p]
Canada	Manufacturing	0.5	25.6	14.6	-15.7	-7.2	4.7	0.4	-0.3	4.7
	Services	13.5	9.9	8.6	7.8	7.4	5.9	6.1	5.6	6.3
	Total	8.9	15.1	10.8	-1.0	2.8	5.6	4.5	4.0	5.9
British Columbia	Manufacturing	-1.1	25.3	36.4	-12.6	-17.2	1.3	-2.5	1.1	5.3
	Services	7.6	-1.7	8.1	3.8	11.7	10.1	4.2	5.5	8.8
	Total	6.3	2.0	12.8	0.5	6.7	8.9	3.4	5.0	8.4
Alberta	Manufacturing	17.5	6.1	36.5	-39.0	-6.5	2.3	11.1	2.9	5.2
	Services	20.8	4.7	6.8	10.4	5.9	9.3	10.7	3.1	15.6
	Total	20.2	4.9	12.2	-0.6	4.2	8.4	10.7	3.1	14.4
Ontario	Manufacturing	3.4	5.9	7.8	-10.3	-0.9	6.4	-1.1	2.7	4.1
	Services	13.4	18.6	12.9	8.4	5.5	4.8	8.1	2.6	4.3
	Total	9.4	13.7	11.1	2.0	3.6	5.2	5.4	2.7	4.2
Quebec	Manufacturing	-5.2	57.8	13.8	-14.8	-13.0	2.8	0.8	-3.5	4.6
	Services	14.1	8.4	3.6	8.3	8.8	3.6	4.4	3.9	4.8
	Total	4.8	30.1	9.0	-4.5	-2.0	3.3	2.8	0.7	4.7
United States	Manufacturing	18.5	0.7	7.6	-5.9	-1.6	-10.0	-4.1	-2.3	-1.2
	Services	20.8	12.8	8.6	8.8	3.1	-9.3	0.3	-0.9	-1.0
	Total	19.9	8.2	8.3	3.7	1.6	-9.5	-1.0	-1.3	-1.1

1. Industry-based GDP data are now reported at basic prices. Previously a "factor cost" method of calculation was used. The difference between the basic price and factor cost concepts is that the factor cost estimate includes all subsidies and excludes all indirect taxes.
2. Figures for the United States were converted from U.S. dollar data using an average annual exchange rate.

[r] Revised
[p] Preliminary

Source: BC Stats

Table 6. High Technology GDP (current dollar) for Selected States,[1] 1997-2006

Value ($Cdn million)[2]

State	1997[r]	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[p]
USA	1,083,533	1,299,449	1,405,915	1,522,382	1,578,458	1,603,560	1,450,811	1,435,798	1,416,944	1,401,887
California	179,043	217,259	260,409	300,189	284,232	271,329	244,895	245,046	241,778	na
Texas	88,886	107,835	107,029	113,781	118,486	120,802	103,249	107,522	108,932	na
New York	62,332	77,116	80,205	86,783	93,664	99,871	90,738	91,726	89,163	na
Florida	39,055	45,034	47,734	51,791	55,316	58,142	52,351	54,694	53,590	na
Virginia	33,688	41,918	44,217	49,390	54,589	55,171	52,847	54,140	54,666	na
Pennsylvania	46,346	53,172	56,433	57,246	66,898	69,795	62,167	55,967	53,843	na
Massachusetts	38,911	46,136	50,367	61,054	61,629	62,996	57,821	53,453	52,039	na
Illinois	40,403	45,605	48,789	49,769	52,154	53,714	47,205	47,349	45,563	na
New Jersey	47,350	53,172	57,404	58,558	66,634	65,731	59,244	54,232	51,613	na
Washington	26,648	36,959	50,095	47,741	46,903	46,126	40,024	38,331	37,492	na
Ohio	28,696	33,925	36,059	36,989	38,301	37,183	33,254	32,826	32,211	na
Georgia	29,842	36,792	40,045	42,632	44,117	44,527	38,670	38,006	37,273	na
Michigan	26,434	30,545	33,364	34,539	36,217	37,484	32,923	28,492	28,725	na
North Carolina	32,033	35,624	40,876	39,356	43,223	47,048	44,109	37,726	40,574	na
Maryland	21,785	24,833	25,231	27,028	30,503	32,764	30,066	30,073	30,345	na
Colorado	27,035	32,943	37,971	44,391	43,957	44,811	38,333	37,285	36,574	na
Minnesota	16,400	19,244	20,428	21,277	22,368	24,676	22,807	22,285	22,398	na
Arizona	25,213	29,959	32,633	32,807	35,212	33,991	32,081	26,030	23,774	na
Connecticut	20,179	24,145	23,879	26,243	29,497	27,862	23,184	23,876	23,027	na
Missouri	17,490	19,283	18,775	20,401	21,087	22,306	20,712	20,110	19,147	na
Other States	315,046	380,580	389,686	421,143	441,635	456,067	422,914	428,931	422,564	na

% change from previous year

State	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[p]
USA	19.9	8.2	8.3	3.7	1.6	-9.5	-1.0	-1.3	-1.1
California	21.3	19.9	15.3	-5.3	-4.5	-9.7	0.1	-1.3	na
Texas	21.3	-0.7	6.3	4.1	2.0	-14.5	4.1	1.3	na
New York	23.7	4.0	8.2	7.9	6.6	-9.1	1.1	-2.8	na
Florida	15.3	6.0	8.5	6.8	5.1	-10.0	4.5	-2.0	na
Virginia	24.4	5.5	11.7	10.5	1.1	-4.2	2.4	1.0	na
Pennsylvania	14.7	6.1	1.4	16.9	4.3	-10.9	-10.0	-3.8	na
Massachusetts	18.6	9.2	21.2	0.9	2.2	-8.2	-7.6	-2.6	na
Illinois	12.9	7.0	2.0	4.8	3.0	-12.1	0.3	-3.8	na
New Jersey	12.3	8.0	2.0	13.8	-1.4	-9.9	-8.5	-4.8	na
Washington	38.7	35.5	-4.7	-1.8	-1.7	-13.2	-4.2	-2.2	na
Ohio	18.2	6.3	2.6	3.5	-2.9	-10.6	-1.3	-1.9	na
Georgia	23.3	8.8	6.5	3.5	0.9	-13.2	-1.7	-1.9	na
Michigan	15.6	9.2	3.5	4.9	3.5	-12.2	-13.5	0.8	na
North Carolina	11.2	14.7	-3.7	9.8	8.8	-6.2	-14.5	7.5	na
Maryland	14.0	1.6	7.1	12.9	7.4	-8.2	0.0	0.9	na
Colorado	21.9	15.3	16.9	-1.0	1.9	-14.5	-2.7	-1.9	na
Minnesota	17.3	6.2	4.2	5.1	10.3	-7.6	-2.3	0.5	na
Arizona	18.8	8.9	0.5	7.3	-3.5	-5.6	-18.9	-8.7	na
Connecticut	19.7	-1.1	9.9	12.4	-5.5	-16.8	3.0	-3.6	na
Missouri	10.3	-2.6	8.7	3.4	5.8	-7.1	-2.9	-4.8	na
Other States	20.8	2.4	8.1	4.9	3.3	-7.3	1.4	-1.5	na

1. Top 20 states by employment.
2. Figures converted from U.S. dollar data using an average annual exchange rate.
na denotes data not available

[r] Revised
[p] Preliminary

Source: BC Stats

Table 7. High Technology Sector Revenues,[1] 1997-2006

$ million

INDUSTRY	1997[r]	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[p]
Manufacturing	**1,763**	**1,845**	**2,267**	**2,819**	**2,524**	**2,122**	**2,241**	**2,530**	**2,484**	**2,798**
Services	**7,241**	**7,931**	**8,544**	**8,949**	**8,931**	**10,014**	**10,867**	**11,248**	**12,029**	**13,141**
Motion picture production & post production	133	206	477	401	413	485	648	442	653	765
Telecommunications	3,797	4,300	4,379	4,541	4,108	4,554	4,908	4,772	4,438	4,649
Engineering services	1,678	1,281	1,154	1,142	1,439	1,415	1,513	1,565	1,983	2,219
Computer and related services	1,355	1,839	2,211	2,480	2,533	2,635	2,899	3,549	3,946	4,438
Other services	278	305	322	385	439	927	900	922	1,009	1,070
High Technology Sector Total	**9,003**	**9,776**	**10,810**	**11,768**	**11,455**	**12,136**	**13,108**	**13,779**	**14,513**	**15,938**

% change from previous year

INDUSTRY	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[p]
Manufacturing	**4.7**	**22.9**	**24.4**	**-10.4**	**-15.9**	**5.6**	**12.9**	**-1.8**	**12.6**
Services	**9.5**	**7.7**	**4.7**	**-0.2**	**12.1**	**8.5**	**3.5**	**6.9**	**9.2**
Motion picture production & post production	55.2	131.1	-15.9	2.9	17.4	33.7	-31.8	47.9	17.2
Telecommunications	13.2	1.8	3.7	-9.5	10.9	7.8	-2.8	-7.0	4.8
Engineering services	-23.7	-9.9	-1.1	26.0	-1.7	6.9	3.4	26.7	11.9
Computer and related services	35.7	20.2	12.2	2.1	4.0	10.0	22.4	11.2	12.5
Other services	9.6	5.7	19.5	13.9	111.2	-2.9	2.4	9.5	6.1
High Technology Sector Total	**8.6**	**10.6**	**8.9**	**-2.7**	**5.9**	**8.0**	**5.1**	**5.3**	**9.8**

1. Note that revenues for the service industries are collected on a company rather than an establishment basis. As a result, revenues for those industries represent the entire Canadian earnings of companies headquartered in BC. Totals are calculated using unrounded data.

[r] Revised
[p] Preliminary
Source: BC Stats and Statistics Canada

Table 8. High Technology Sector Revenues, by Province and the USA, 1997-2006

Cdn $ million

Region	1997[r]	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[p]
Canada	97,262	112,218	125,740	147,229	145,514	142,644	142,450	150,135	152,987	160,407
British Columbia	9,003	9,776	10,810	11,768	11,455	12,136	13,108	13,779	14,513	15,938
Alberta	9,153	10,830	11,023	13,111	14,190	13,377	13,786	15,090	15,003	16,606
Ontario	43,838	50,652	55,948	65,587	66,666	64,348	62,631	68,049	69,104	71,788
Quebec	28,239	32,569	39,174	47,192	43,248	42,573	42,185	42,282	41,349	42,432
United States[1]	2,019,841	2,379,187	2,575,813	2,800,495	2,885,090	2,831,446	2,538,686	2,476,078	2,464,838	2,456,659

% change from previous year

Region	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[p]
Canada	15.4	12.0	17.1	-1.2	-2.0	-0.1	5.4	1.9	4.8
British Columbia	8.6	10.6	8.9	-2.7	5.9	8.0	5.1	5.3	9.8
Alberta	18.3	1.8	18.9	8.2	-5.7	3.1	9.5	-0.6	10.7
Ontario	15.5	10.5	17.2	1.6	-3.5	-2.7	8.7	1.6	3.9
Quebec	15.3	20.3	20.5	-8.4	-1.6	-0.9	0.2	-2.2	2.6
United States	17.8	8.3	8.7	3.0	-1.9	-10.3	-2.5	-0.5	-0.3

1. Figures for the United States were converted from U.S. dollar data using an average annual exchange rate.

[r] Revised
[p] Preliminary
Source: BC Stats

Table 9. High Technology Sector Revenues for Selected States,[1] 1997-2006

Value ($Cdn million)[2]

State	1997[r]	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[p]
USA	2,019,841	2,379,187	2,575,813	2,800,495	2,885,090	2,831,446	2,538,686	2,476,078	2,464,838	2,456,659
California	375,725	452,617	494,698	534,159	548,402	507,152	454,268	432,969	430,617	na
Texas	162,994	181,438	210,619	239,717	232,882	229,296	206,671	203,301	205,583	na
New York	116,938	137,441	144,525	160,204	161,783	162,006	147,556	146,110	145,466	na
Florida	72,631	83,969	93,846	103,043	107,838	109,966	98,757	97,884	95,693	na
Virginia	63,795	79,321	89,665	101,377	109,651	109,169	96,683	98,079	92,003	na
Pennsylvania	79,257	91,985	98,221	110,846	118,863	119,942	105,259	101,407	100,711	na
Massachusetts	80,885	94,858	102,452	112,193	114,965	115,776	104,587	98,567	97,095	na
Illinois	80,392	91,525	95,683	106,907	103,103	97,530	86,850	87,276	82,036	na
New Jersey	71,667	83,845	96,167	102,293	114,536	118,566	104,219	97,442	96,475	na
Washington	40,681	56,197	66,196	71,697	81,929	87,618	78,280	76,409	73,482	na
Ohio	56,981	67,892	70,961	78,634	79,691	73,991	64,951	63,737	64,670	na
Georgia	52,069	62,871	72,687	79,213	83,940	85,560	75,861	74,368	72,683	na
Michigan	41,748	47,492	53,420	57,372	56,888	55,369	49,462	45,974	45,741	na
North Carolina	65,928	71,771	78,508	79,179	78,848	78,134	72,211	67,130	73,600	na
Maryland	35,363	43,016	46,199	51,387	55,943	57,024	51,992	50,389	51,523	na
Colorado	48,176	54,984	60,642	66,298	68,039	70,269	61,660	58,624	58,030	na
Minnesota	34,960	40,504	42,523	46,869	49,130	49,256	44,977	42,514	43,744	na
Arizona	45,442	51,085	57,616	59,277	56,478	58,521	56,499	48,218	43,973	na
Connecticut	38,456	43,643	43,291	46,608	52,329	49,099	41,523	40,152	39,596	na
Missouri	31,154	35,822	37,983	39,958	42,775	44,695	41,901	47,700	46,684	na
Other States	574,612	677,963	701,325	745,975	767,790	754,077	679,420	676,413	679,429	na

% change from previous year

State	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[p]
USA	17.8	8.3	8.7	3.0	-1.9	-10.3	-2.5	-0.5	-0.3
California	20.5	9.3	8.0	2.7	-7.5	-10.4	-4.7	-0.5	na
Texas	11.3	16.1	13.8	-2.9	-1.5	-9.9	-1.6	1.1	na
New York	17.5	5.2	10.8	1.0	0.1	-8.9	-1.0	-0.4	na
Florida	15.6	11.8	9.8	4.7	2.0	-10.2	-0.9	-2.2	na
Virginia	24.3	13.0	13.1	8.2	-0.4	-11.4	1.4	-6.2	na
Pennsylvania	16.1	6.8	12.9	7.2	0.9	-12.2	-3.7	-0.7	na
Massachusetts	17.3	8.0	9.5	2.5	0.7	-9.7	-5.8	-1.5	na
Illinois	13.8	4.5	11.7	-3.6	-5.4	-11.0	0.5	-6.0	na
New Jersey	17.0	14.7	6.4	12.0	3.5	-12.1	-6.5	-1.0	na
Washington	38.1	17.8	8.3	14.3	6.9	-10.7	-2.4	-3.8	na
Ohio	19.1	4.5	10.8	1.3	-7.2	-12.2	-1.9	1.5	na
Georgia	20.7	15.6	9.0	6.0	1.9	-11.3	-2.0	-2.3	na
Michigan	13.8	12.5	7.4	-0.8	-2.7	-10.7	-7.1	-0.5	na
North Carolina	8.9	9.4	0.9	-0.4	-0.9	-7.6	-7.0	9.6	na
Maryland	21.6	7.4	11.2	8.9	1.9	-8.8	-3.1	2.3	na
Colorado	14.1	10.3	9.3	2.6	3.3	-12.3	-4.9	-1.0	na
Minnesota	15.9	5.0	10.2	4.8	0.3	-8.7	-5.5	2.9	na
Arizona	12.4	12.8	2.9	-4.7	3.6	-3.5	-14.7	-8.8	na
Connecticut	13.5	-0.8	7.7	12.3	-6.2	-15.4	-3.3	-1.4	na
Missouri	15.0	6.0	5.2	7.1	4.5	-6.3	13.8	-2.1	na
Other States	18.0	3.4	6.4	2.9	-1.8	-9.9	-0.4	0.4	na

1. Top 20 states by employment.
2. Figures converted from U.S. dollar data using an average annual exchange rate.
na denotes data not available

[r] Revised
[p] Preliminary

Source: BC Stats

Table 10. High Technology Sector Employment,[1] 1997-2006

INDUSTRY	1997[r]	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[p]
Manufacturing Industries	**10,790**	**11,230**	**13,620**	**15,050**	**15,180**	**13,830**	**12,590**	**12,180**	**13,190**	**13,590**
Service Industries	**45,970**	**44,930**	**48,120**	**52,070**	**56,420**	**52,880**	**53,330**	**55,080**	**57,000**	**61,000**
Motion picture production & post production	1,540	2,390	3,740	3,090	3,240	4,840	4,000	4,980	5,320	5,620
Telecommunications	16,340	15,940	15,320	15,890	15,770	12,160	11,220	11,990	11,160	11,530
Engineering services	12,770	10,070	9,900	9,300	10,100	9,300	9,110	9,500	9,930	11,020
Computer and related services	10,970	12,020	14,580	18,550	20,780	21,140	23,200	22,650	24,070	25,350
Other services	4,360	4,520	4,580	5,240	6,530	5,440	5,810	5,970	6,520	7,480
High Technology Sector Total	**56,760**	**56,170**	**61,740**	**67,120**	**71,590**	**66,710**	**65,920**	**67,260**	**70,190**	**74,590**
BC Industrial Aggregate	**1,496,760**	**1,508,590**	**1,511,500**	**1,571,810**	**1,604,270**	**1,608,420**	**1,648,530**	**1,689,720**	**1,746,190**	**1,822,400**

% change from previous year

INDUSTRY	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[p]
Manufacturing Industries	**4.1**	**21.2**	**10.5**	**0.9**	**-8.9**	**-9.0**	**-3.3**	**8.3**	**3.0**
Service Industries	**-2.3**	**7.1**	**8.2**	**8.3**	**-6.3**	**0.9**	**3.3**	**3.5**	**7.0**
Motion picture production & post production	55.1	56.9	-17.3	4.6	49.6	-17.5	24.6	6.9	5.6
Telecommunications	-2.4	-3.9	3.7	-0.8	-22.9	-7.7	6.8	-6.9	3.3
Engineering services	-21.1	-1.7	-6.1	8.6	-7.9	-2.1	4.3	4.6	11.0
Computer and related services	9.5	21.4	27.2	12.0	1.7	9.8	-2.4	6.3	5.3
Other services	3.8	1.2	14.6	24.5	-16.7	6.8	2.9	9.1	14.7
High Technology Sector Total	**-1.0**	**9.9**	**8.7**	**6.7**	**-6.8**	**-1.2**	**2.0**	**4.4**	**6.3**
BC Industrial Aggregate	**0.8**	**0.2**	**4.0**	**2.1**	**0.3**	**2.5**	**2.5**	**3.3**	**4.4**

1. Totals and percent changes are calculated using unrounded data.

[r] Revised

[p] Preliminary

Source: BC Stats and Statistics Canada

Table 11. Employment by Industry,[1] British Columbia, 1996-2006

Persons (thousands)

	1996	1997	1998	1999	2000	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006
Goods Producing Industries	**298.8**	**308.6**	**301.3**	**301.9**	**314.8**	**298.4**	**286.9**	**288.8**	**298.9**	**309.7**	**325.3**
Agriculture and Related	na	na	na	na	na	na	na	na	na	na	na
Fishing and Related	na	na	na	na	na	na	na	na	na	na	na
Forestry and Related	81.2	79.4	73.6	76.8	80.5	70.8	62.6	63.7	64.1	62.0	59.5
Logging and Forestry	*20.1*	*19.7*	*17.6*	*17.8*	*18.3*	*18.1*	*14.2*	*14.0*	*14.6*	*13.6*	*12.9*
Paper and Allied Products	*18.5*	*16.6*	*16.6*	*17.8*	*18.8*	*15.0*	*11.6*	*13.6*	*13.2*	*12.3*	*12.2*
Wood Manufacturing	*42.6*	*43.1*	*39.4*	*41.2*	*43.4*	*37.6*	*36.7*	*36.0*	*36.4*	*36.2*	*34.4*
Mining and Oil and Gas Extraction	11.9	12.8	13.0	10.7	10.6	10.5	10.3	10.5	11.5	12.6	13.3
Other Manufacturing	77.2	83.2	87.8	91.5	98.9	95.5	92.4	89.7	90.4	93.6	101.6
Construction	76.7	80.0	77.2	72.6	74.3	73.7	76.5	79.4	87.5	96.0	107.9
Utilities	8.6	8.6	8.4	9.1	9.4	9.2	9.3	8.6	8.7	9.3	9.7
Service Producing Industries	**1,157.4**	**1,183.0**	**1,198.1**	**1,199.6**	**1,250.4**	**1,294.6**	**1,312.7**	**1,345.5**	**1,366.8**	**1,399.5**	**1,466.4**
Retail and Wholesale Trade	252.9	255.9	257.8	258.7	271.3	282.4	293.0	306.7	316.7	326.7	337.5
Transportation and Warehousing	82.0	83.6	85.1	83.2	83.2	84.1	84.4	83.2	84.0	85.8	89.0
Information and Culture	35.0	34.5	35.0	34.5	36.3	37.2	37.2	37.8	38.0	38.0	41.9
Finance, Insurance and Real Estate	94.8	99.0	99.7	97.9	101.6	99.0	99.2	97.8	96.1	97.2	101.2
Professional, Scientific and Technical	66.6	68.9	72.4	74.4	82.0	84.9	81.4	83.6	83.8	86.1	92.5
Educational	120.5	121.5	122.2	123.6	127.7	125.8	127.1	125.5	127.6	129.9	135.7
Health and Social	154.0	155.7	162.9	167.9	174.5	178.3	185.5	198.6	196.7	199.5	207.9
Arts, Entertainment and Recreation	29.9	29.5	27.3	24.7	26.5	29.6	30.0	30.9	33.1	33.3	35.5
Accommodation, and Food	132.1	137.3	139.0	139.3	144.8	149.5	151.6	155.5	157.3	161.8	170.3
Public Administration	76.1	76.1	76.6	74.7	74.1	83.7	82.8	84.2	83.8	85.2	88.1
Other Services	113.6	121.1	120.1	120.7	128.5	140.0	140.5	141.7	149.7	156.1	166.9
BC Industrial Aggregate	**1,459.4**	**1,496.8**	**1,508.6**	**1,511.5**	**1,571.8**	**1,604.3**	**1,608.4**	**1,648.5**	**1,689.7**	**1,746.2**	**1,822.4**
High Technology Sector Total	**na**	**56.8**	**56.2**	**61.7**	**67.1**	**71.6**	**66.7**	**65.9**	**67.3**	**70.2**	**74.6**

% change from previous year

	1996	1997	1998	1999	2000	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006
Goods Producing Industries	**-0.1**	**3.3**	**-2.4**	**0.2**	**4.3**	**-5.2**	**-3.8**	**0.7**	**3.5**	**3.6**	**5.0**
Agriculture and Related	na	na	na	na	na	na	na	na	na	na	na
Fishing and Related	na	na	na	na	na	na	na	na	na	na	na
Forestry and Related	0.8	-2.3	-7.2	4.3	4.8	-12.1	-11.6	1.8	0.8	-3.3	-4.0
Logging and Forestry	1.3	-2.0	-10.6	0.8	2.9	-0.8	-21.6	-1.3	3.7	-6.9	-5.2
Paper and Allied Products	-8.9	-10.3	0.1	7.1	6.0	-20.2	-22.8	17.4	-2.9	-7.2	-0.2
Wood Manufacturing	5.5	1.0	-8.5	4.7	5.1	-13.3	-2.3	-2.0	1.0	-0.5	-4.8
Mining and Oil and Gas Extraction	-9.2	7.7	1.8	-18.0	-0.4	-0.7	-2.2	2.0	9.5	9.7	5.5
Other Manufacturing	1.5	7.8	5.5	4.2	8.1	-3.5	-3.2	-2.9	0.7	3.6	8.5
Construction	2.6	4.4	-3.5	-5.9	2.3	-0.9	3.9	3.8	10.2	9.8	12.3
Utilities	3.4	-0.6	-2.2	8.6	2.7	-1.8	1.1	-7.5	1.0	7.2	4.1
Service Producing Industries	**1.3**	**2.2**	**1.3**	**0.1**	**4.2**	**3.5**	**1.4**	**2.5**	**1.6**	**2.4**	**4.8**
Retail and Wholesale Trade	0.4	1.2	0.7	0.4	4.9	4.1	3.7	4.7	3.3	3.2	3.3
Transportation and Warehousing	-5.4	2.0	1.7	-2.2	0.0	1.0	0.4	-1.4	0.9	2.2	3.7
Information and Culture	1.9	-1.5	1.6	-1.5	5.2	2.4	-0.1	1.6	0.7	0.0	10.2
Finance, Insurance and Real Estate	-2.9	4.4	0.7	-1.8	3.8	-2.5	0.2	-1.4	-1.7	1.2	4.1
Professional, Scientific and Technical	2.2	3.6	5.1	2.7	10.3	3.6	-4.2	2.8	0.2	2.7	7.4
Educational	7.0	0.8	0.6	1.1	3.3	-1.5	1.0	-1.2	1.6	1.8	4.4
Health and Social	2.0	1.1	4.7	3.0	3.9	2.2	4.1	7.0	-0.9	1.4	4.2
Arts, Entertainment and Recreation	-0.3	-1.4	-7.3	-9.4	7.0	11.8	1.4	3.0	7.1	0.5	6.8
Accommodation, and Food	3.7	3.9	1.3	0.2	4.0	3.2	1.4	2.5	1.2	2.8	5.3
Public Administration	-0.9	0.0	0.6	-2.4	-0.9	13.0	-1.1	1.7	-0.4	1.6	3.4
Other Services	4.3	6.6	-0.8	0.5	6.4	9.0	0.3	0.9	5.6	4.3	6.9
BC Industrial Aggregate	**1.0**	**2.6**	**0.8**	**0.2**	**4.0**	**2.1**	**0.3**	**2.5**	**2.5**	**3.3**	**4.4**
High Technology Sector Total	**na**	**na**	**-1.0**	**9.9**	**8.7**	**6.7**	**-6.8**	**-1.2**	**2.0**	**4.4**	**6.3**

1. Totals and percent changes are calculated using unrounded data.

na: Data not available for specific industry.

Source: Statistics Canada and BC Stats

Table 12. High Technology Sector Employment, by Province, 1997-2006

Province	1997[r]	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[p]
Canada	563,590	602,490	649,560	697,280	730,180	722,390	717,360	717,410	734,270	760,480
British Columbia	56,760	56,170	61,740	67,120	71,590	66,710	65,920	67,260	70,190	74,590
Alberta	51,790	56,670	59,430	62,360	72,730	70,610	69,600	74,450	75,920	84,930
Ontario	242,710	260,410	279,310	301,550	311,560	311,450	307,670	309,830	314,420	324,620
Quebec	165,920	178,330	187,870	202,330	209,330	204,360	207,000	201,610	202,340	202,800

% change from previous year

Province	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[p]
Canada	6.9	7.8	7.3	4.7	-1.1	-0.7	0.0	2.4	3.6
British Columbia	-1.0	9.9	8.7	6.7	-6.8	-1.2	2.0	4.4	6.3
Alberta	9.4	4.9	4.9	16.6	-2.9	-1.4	7.0	2.0	11.9
Ontario	7.3	7.3	8.0	3.3	0.0	-1.2	0.7	1.5	3.2
Quebec	7.5	5.4	7.7	3.5	-2.4	1.3	-2.6	0.4	0.2

[r] Revised
[p] Preliminary

Source: BC Stats

Table 13. High Technology Sector Employment for Top 20 US States, 1997-2006

State	1997	1998	1999	2000	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[p]
USA	7,613,960	7,944,010	8,232,580	8,659,890	8,590,420	7,932,740	7,534,600	7,516,620	7,644,860	7,845,730
California	1,334,330	1,360,150	1,402,470	1,522,770	1,501,190	1,377,690	1,297,460	1,314,090	1,334,400	1,372,620
Texas	563,430	611,560	624,280	665,090	655,550	592,950	565,670	556,360	570,620	590,550
New York	430,120	450,480	468,830	500,730	495,770	461,550	431,060	425,740	429,230	433,070
Florida	312,840	331,490	349,270	369,130	372,210	350,200	337,670	345,780	360,260	367,130
Virginia	239,250	259,530	278,910	307,700	307,500	285,530	278,420	291,930	302,110	312,400
Pennsylvania	296,730	310,830	322,840	335,870	335,370	310,700	294,520	286,880	288,500	297,250
Massachusetts	315,680	325,230	329,980	357,270	358,790	317,870	295,550	288,490	290,290	296,600
Illinois	326,380	334,330	329,620	341,680	335,940	305,560	285,040	277,230	278,610	282,320
New Jersey	291,880	299,130	308,720	318,730	319,800	292,300	276,380	271,130	271,970	281,420
Washington	252,020	270,240	265,750	274,430	276,180	251,990	235,180	233,810	244,000	259,650
Ohio	238,200	247,880	249,450	254,280	248,970	231,420	219,910	210,970	213,150	216,660
Georgia	212,340	216,180	231,980	245,560	239,240	221,180	215,700	211,410	211,620	214,570
Michigan	238,840	243,150	247,040	255,970	247,090	234,580	225,010	216,740	216,670	214,120
North Carolina	197,980	206,500	215,050	225,780	227,470	204,940	193,480	193,420	202,180	206,310
Maryland	162,940	171,670	179,530	194,240	195,040	190,530	188,880	192,820	198,320	202,650
Colorado	186,960	206,580	221,970	238,680	237,650	208,600	191,680	188,920	188,280	188,360
Minnesota	165,830	173,940	177,920	181,380	176,020	165,210	156,140	156,840	160,080	162,520
Arizona	144,780	153,180	154,990	168,990	168,370	153,730	145,400	146,400	148,450	154,870
Connecticut	143,150	145,770	146,570	150,760	149,880	140,720	133,080	132,160	130,790	131,940
Missouri	125,200	129,950	180,510	136,840	130,010	121,500	119,580	122,570	124,130	127,510
Other States	1,435,110	1,496,240	1,546,910	1,614,030	1,612,380	1,513,960	1,448,790	1,452,960	1,481,210	1,533,230

% change from previous year[1]

State	1998	1999	2000	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[p]
USA	4.3	3.6	5.2	-0.8	-7.7	-5.0	-0.2	1.7	2.6
California	1.9	3.1	8.6	-1.4	-8.2	-5.8	1.3	1.5	2.9
Texas	8.5	2.1	6.5	-1.4	-9.5	-4.6	-1.6	2.6	3.5
New York	4.7	4.1	6.8	-1.0	-6.9	-6.6	-1.2	0.8	0.9
Florida	6.0	5.4	5.7	0.8	-5.9	-3.6	2.4	4.2	1.9
Virginia	8.5	7.5	10.3	-0.1	-7.1	-2.5	4.9	3.5	3.4
Pennsylvania	4.8	3.9	4.0	-0.1	-7.4	-5.2	-2.6	0.6	3.0
Massachusetts	3.0	1.5	8.3	0.4	-11.4	-7.0	-2.4	0.6	2.2
Illinois	2.4	-1.4	3.7	-1.7	-9.0	-6.7	-2.7	0.5	1.3
New Jersey	2.5	3.2	3.2	0.3	-8.6	-5.4	-1.9	0.3	3.5
Washington	7.2	-1.7	3.3	0.6	-8.8	-6.7	-0.6	4.4	6.4
Ohio	4.1	0.6	1.9	-2.1	-7.0	-5.0	-4.1	1.0	1.6
Georgia	1.8	7.3	5.9	-2.6	-7.5	-2.5	-2.0	0.1	1.4
Michigan	1.8	1.6	3.6	-3.5	-5.1	-4.1	-3.7	0.0	-1.2
North Carolina	4.3	4.1	5.0	0.8	-9.9	-5.6	0.0	4.5	2.0
Maryland	5.4	4.6	8.2	0.4	-2.3	-0.9	2.1	2.9	2.2
Colorado	10.5	7.5	7.5	-0.4	-12.2	-8.1	-1.4	-0.3	0.0
Minnesota	4.9	2.3	1.9	-3.0	-6.1	-5.5	0.4	2.1	1.5
Arizona	5.8	1.2	9.0	-0.4	-8.7	-5.4	0.7	1.4	4.3
Connecticut	1.8	0.5	2.9	-0.6	-6.1	-5.4	-0.7	-1.0	0.9
Missouri	3.8	38.9	-24.2	-5.0	-6.5	-1.6	2.5	1.3	2.7
Other States	4.4	3.4	4.3	-0.1	-6.1	-4.3	0.3	1.9	3.5

1. Percent changes are calculated using unrounded data.

[r] Revised

[p] Preliminary

Source: BC Stats

Table 14. High Technology Sector Wages and Salaries, 1997-2006

Value ($ million)

INDUSTRY	1997[r]	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[p]
Manufacturing Industries	**386.4**	**447.5**	**506.4**	**555.4**	**632.9**	**712.4**	**697.2**	**631.7**	**661.6**	**701.9**
Service Industries	**2,432.4**	**2,248.1**	**2,344.7**	**2,668.0**	**2,887.9**	**2,647.9**	**2,765.8**	**2,830.8**	**3,162.9**	**3,496.6**
Motion picture production & post production	44.9	53.7	114.9	95.5	94.2	102.2	89.7	100.5	122.6	143.6
Telecommunications	871.9	841.1	810.9	847.1	831.3	648.1	584.3	641.6	629.1	675.1
Engineering services	803.6	583.9	495.7	529.2	650.7	566.7	617.0	618.9	838.0	937.7
Computer and related services	599.4	655.9	811.1	1,062.7	1,149.0	1,188.4	1,316.0	1,314.8	1,396.2	1,518.3
Other services	112.5	113.6	112.1	133.5	162.7	142.4	158.8	155.0	176.9	221.9
High Technology Sector Total	**2,818.9**	**2,695.6**	**2,851.1**	**3,223.3**	**3,520.8**	**3,360.3**	**3,463.1**	**3,462.6**	**3,824.5**	**4,198.5**
BC Industrial Aggregate	**49,851.4**	**50,583.7**	**51,305.4**	**54,325.5**	**55,523.3**	**56,354.8**	**58,424.7**	**60,975.3**	**64,857.5**	**70,292.9**

% change from previous year

INDUSTRY	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[p]
Manufacturing Industries	**15.8**	**13.2**	**9.7**	**14.0**	**12.6**	**-2.1**	**-9.4**	**4.7**	**6.1**
Service Industries	**-7.6**	**4.3**	**13.8**	**8.2**	**-8.3**	**4.5**	**2.4**	**11.7**	**10.6**
Motion picture production & post production	19.6	114.0	-16.9	-1.4	8.5	-12.2	12.0	22.0	17.1
Telecommunications	-3.5	-3.6	4.5	-1.9	-22.0	-9.8	9.8	-1.9	7.3
Engineering services	-27.3	-15.1	6.8	23.0	-12.9	8.9	0.3	35.4	11.9
Computer and related services	9.4	23.7	31.0	8.1	3.4	10.7	-0.1	6.2	8.7
Other services	1.0	-1.3	19.1	21.9	-12.5	11.5	-2.4	14.1	25.4
High Technology Sector Total	**-4.4**	**5.8**	**13.1**	**9.2**	**-4.6**	**3.1**	**0.0**	**10.5**	**9.8**
BC Industrial Aggregate	**1.5**	**1.4**	**5.9**	**2.2**	**1.5**	**3.7**	**4.4**	**6.4**	**8.4**

[r] Revised
[p] Preliminary

Source: BC Stats and Statistics Canada

Table 15. High Technology Sector Average Weekly Earnings,[1] 1997-2006

Dollars per employee week (including overtime)

INDUSTRY	1997	1998	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[p]
Manufacturing Industries	**690**	**760**	**710**	**710**	**800**	**990**	**1,060**	**990**	**960**	**990**
Service Industries	**1,010**	**960**	**930**	**980**	**980**	**960**	**990**	**990**	**1,060**	**1,100**
Motion picture production & post production	560	430	590	590	560	400	430	390	440	490
Telecommunications	1,020	1,010	1,020	1,020	1,010	1,020	1,000	1,030	1,080	1,120
Engineering services	1,210	1,110	960	1,090	1,240	1,170	1,300	1,250	1,620	1,630
Computer and related services	1,050	1,050	1,070	1,100	1,060	1,080	1,090	1,110	1,110	1,150
Other services	490	480	470	490	480	500	520	500	520	570
High Technology Sector Total	**950**	**920**	**890**	**920**	**940**	**970**	**1,010**	**990**	**1,040**	**1,080**
BC Industrial Aggregate	**640**	**640**	**650**	**660**	**660**	**670**	**680**	**690**	**710**	**740**

% change from previous year

INDUSTRY	1998	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[p]
Manufacturing Industries	**11.3**	**-6.7**	**-0.7**	**13.0**	**23.5**	**7.5**	**-6.3**	**-3.3**	**3.0**
Service Industries	**-5.4**	**-2.6**	**5.2**	**-0.1**	**-2.2**	**3.6**	**-0.9**	**8.0**	**3.3**
Motion picture production & post production	-22.9	36.7	0.6	-5.9	-27.4	6.2	-10.0	14.2	10.9
Telecommunications	-1.1	0.3	0.7	-1.1	1.1	-2.3	2.8	5.3	3.9
Engineering services	-7.9	-13.6	13.6	13.2	-5.4	11.1	-3.8	29.5	0.8
Computer and related services	-0.1	1.9	3.0	-3.5	1.7	0.9	2.3	-0.1	3.3
Other services	-2.6	-2.6	4.1	-2.2	5.1	4.4	-5.0	4.5	9.3
High Technology Sector Total	**-3.4**	**-3.8**	**4.0**	**2.4**	**2.4**	**4.3**	**-2.0**	**5.8**	**3.3**
BC Industrial Aggregate	**0.7**	**1.2**	**1.8**	**0.1**	**1.2**	**1.2**	**1.8**	**2.9**	**3.8**

1. Totals and percent changes are calculated using unrounded data.

[r] Revised

[p] Preliminary

Source: BC Stats and Statistics Canada

Table 16. High Technology Sector Average Weekly Earnings, by Province, 1997-2006

Province	1997	1998	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[p]
Canada	840	850	870	910	920	940	970	990	1,010	1,050
British Columbia	950	920	890	920	940	970	1,010	990	1,040	1,080
Alberta	900	900	850	910	930	990	1,010	1,000	1,010	1,060
Ontario	880	910	940	990	1,010	1,020	1,060	1,070	1,100	1,130
Quebec	780	780	830	830	840	850	850	910	900	950

% change from previous year

Province	1998[r]	1999[r]	2000[r]	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[p]
Canada	1.3	1.9	4.1	1.7	2.0	3.1	1.9	2.3	4.3
British Columbia	-3.4	-3.8	4.0	2.4	2.4	4.3	-2.0	5.8	3.3
Alberta	-0.1	-5.8	7.1	2.4	5.9	2.1	-0.5	1.2	4.2
Ontario	3.4	3.4	5.2	1.8	1.2	3.6	0.9	3.0	2.9
Quebec	-0.3	5.9	0.2	1.4	1.1	0.6	6.3	-1.1	6.3

[r] Revised

[p] Preliminary

Source: BC Stats

Table 17. High Technology Sector Wages and Salaries for Selected US States,[1] 1997-2006

Value ($Cdn million)[2]

State	1997	1998	1999	2000	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[p]
USA	540,789	650,486	761,040	849,989	852,061	799,930	706,442	687,018	677,213	683,157
California	109,905	128,774	155,495	199,136	181,372	164,581	146,792	146,529	145,736	146,553
Texas	40,876	51,794	55,646	63,515	65,849	59,999	52,093	50,296	50,400	52,455
New York	30,526	36,422	40,057	46,549	49,505	47,330	40,935	39,475	38,574	38,114
Florida	18,469	22,199	25,146	28,195	29,827	28,981	25,687	25,760	25,885	26,013
Virginia	17,683	23,413	27,294	31,634	34,012	30,778	28,138	28,945	29,429	29,527
Pennsylvania	20,194	24,257	27,104	29,268	30,403	29,681	26,051	24,688	23,992	24,120
Massachusetts	25,317	29,580	34,164	42,540	41,674	37,541	32,780	31,753	30,615	30,855
Illinois	23,477	27,231	29,403	31,974	32,343	30,042	25,855	24,773	24,612	24,139
New Jersey	25,392	29,947	32,526	34,936	36,479	34,962	30,584	29,475	28,089	29,158
Washington	21,930	29,392	35,626	36,207	35,094	33,012	28,153	23,384	24,011	25,522
Ohio	14,285	16,933	18,129	19,561	20,292	19,337	17,052	15,971	15,435	15,303
Georgia	14,099	16,835	19,617	22,836	22,694	21,476	19,221	18,142	17,755	17,796
Michigan	17,009	21,055	22,433	24,094	23,942	23,162	20,906	19,354	18,489	17,567
North Carolina	12,607	14,756	17,091	19,601	20,400	18,893	16,618	16,229	16,295	16,241
Maryland	12,022	14,417	41,466	18,254	20,014	20,235	18,327	18,381	18,175	18,145
Colorado	13,874	18,197	21,275	25,488	25,492	22,643	19,543	18,321	17,795	17,850
Minnesota	10,367	12,361	13,641	15,059	15,333	15,036	13,536	13,470	12,823	12,637
Arizona	9,823	12,154	12,865	15,001	15,381	14,435	12,628	12,441	12,392	12,813
Connecticut	11,356	13,514	14,707	15,690	16,289	15,261	13,287	12,974	12,459	12,256
Missouri	7,994	9,277	9,763	10,949	10,987	10,587	9,882	9,896	9,738	9,855
Other States	83,583	97,978	107,589	119,500	124,679	121,961	108,372	106,760	104,513	106,237

% change from previous year

State	1998	1999	2000	2001[r]	2002[r]	2003[r]	2004[r]	2005[r]	2006[p]
USA	20.3	17.0	11.7	0.2	-6.1	-11.7	-2.7	-1.4	0.9
California	17.2	20.8	28.1	-8.9	-9.3	-10.8	-0.2	-0.5	0.6
Texas	26.7	7.4	14.1	3.7	-8.9	-13.2	-3.4	0.2	4.1
New York	19.3	10.0	16.2	6.3	-4.4	-13.5	-3.6	-2.3	-1.2
Florida	20.2	13.3	12.1	5.8	-2.8	-11.4	0.3	0.5	0.5
Virginia	32.4	16.6	15.9	7.5	-9.5	-8.6	2.9	1.7	0.3
Pennsylvania	20.1	11.7	8.0	3.9	-2.4	-12.2	-5.2	-2.8	0.5
Massachusetts	16.8	15.5	24.5	-2.0	-9.9	-12.7	-3.1	-3.6	0.8
Illinois	16.0	8.0	8.7	1.2	-7.1	-13.9	-4.2	-0.6	-1.9
New Jersey	17.9	8.6	7.4	4.4	-4.2	-12.5	-3.6	-4.7	3.8
Washington	34.0	21.2	1.6	-3.1	-5.9	-14.7	-16.9	2.7	6.3
Ohio	18.5	7.1	7.9	3.7	-4.7	-11.8	-6.3	-3.4	-0.9
Georgia	19.4	16.5	16.4	-0.6	-5.4	-10.5	-5.6	-2.1	0.2
Michigan	23.8	6.5	7.4	-0.6	-3.3	-9.7	-7.4	-4.5	-5.0
North Carolina	17.0	15.8	14.7	4.1	-7.4	-12.0	-2.3	0.4	-0.3
Maryland	19.9	187.6	-56.0	9.6	1.1	-9.4	0.3	-1.1	-0.2
Colorado	31.2	16.9	19.8	0.0	-11.2	-13.7	-6.3	-2.9	0.3
Minnesota	19.2	10.4	10.4	1.8	-1.9	-10.0	-0.5	-4.8	-1.4
Arizona	23.7	5.8	16.6	2.5	-6.2	-12.5	-1.5	-0.4	3.4
Connecticut	19.0	8.8	6.7	3.8	-6.3	-12.9	-2.4	-4.0	-1.6
Missouri	16.0	5.2	12.1	0.3	-3.6	-6.7	0.1	-1.6	1.2
Other States	17.2	9.8	11.1	4.3	-2.2	-11.1	-1.5	-2.1	1.6

1. Top 20 states by employment.
2. Figures converted from U.S. dollar data using an average annual exchange rate.

[r] Revised
[p] Preliminary

Source: BC Stats

Table 18. High Technology Sector Average Weekly Earnings for Selected US States,[1] 1997-2006

	Value ($Cdn)[2]									
State	**1997**	**1998**	**1999**	**2000**	**2001[r]**	**2002[r]**	**2003[r]**	**2004[r]**	**2005[r]**	**2006[p]**
USA	1362	1571	1772	1882	1902	1935	1798	1753	1698	1670
California	1580	1816	2126	2508	2317	2291	2170	2138	2095	2048
Texas	1391	1624	1709	1831	1926	1941	1766	1734	1694	1703
New York	1361	1551	1639	1783	1915	1967	1821	1778	1724	1688
Florida	1132	1284	1381	1465	1537	1587	1459	1429	1378	1359
Virginia	1417	1730	1877	1972	2121	2067	1938	1902	1868	1813
Pennsylvania	1305	1497	1610	1671	1739	1832	1696	1650	1595	1556
Massachusetts	1538	1744	1986	2284	2228	2265	2127	2111	2023	1995
Illinois	1379	1562	1711	1795	1846	1886	1740	1714	1694	1640
New Jersey	1668	1920	2021	2102	2188	2294	2122	2085	1981	1987
Washington	1669	2086	2571	2530	2437	2512	2296	1918	1887	1885
Ohio	1150	1310	1394	1475	1563	1603	1487	1452	1389	1355
Georgia	1273	1494	1622	1784	1819	1862	1709	1646	1609	1591
Michigan	1366	1661	1742	1805	1858	1894	1782	1713	1637	1573
North Carolina	1221	1370	1524	1665	1720	1768	1647	1609	1546	1510
Maryland	1415	1611	4430	1802	1968	2037	1861	1828	1758	1717
Colorado	1423	1689	1838	2048	2057	2082	1955	1860	1813	1817
Minnesota	1199	1363	1470	1592	1671	1745	1663	1647	1536	1491
Arizona	1301	1522	1592	1702	1752	1801	1666	1630	1601	1587
Connecticut	1521	1778	1924	1996	2084	2080	1915	1883	1827	1782
Missouri	1225	1369	1037	1535	1621	1671	1585	1548	1505	1482

	% change from previous year								
State	**1998**	**1999**	**2000**	**2001[r]**	**2002[r]**	**2003[r]**	**2004[r]**	**2005[r]**	**2006[p]**
USA	15.3	12.8	6.2	1.1	1.7	-7.1	-2.5	-3.1	-1.7
California	14.9	17.1	17.9	-7.6	-1.1	-5.3	-1.4	-2.1	-2.2
Texas	16.7	5.2	7.1	5.2	0.7	-9.0	-1.8	-2.3	0.6
New York	13.9	5.7	8.8	7.4	2.7	-7.4	-2.4	-3.1	-2.1
Florida	13.4	7.5	6.1	4.9	3.3	-8.1	-2.1	-3.6	-1.4
Virginia	22.1	8.5	5.1	7.6	-2.5	-6.2	-1.9	-1.8	-3.0
Pennsylvania	14.7	7.6	3.8	4.0	5.4	-7.4	-2.7	-3.4	-2.4
Massachusetts	13.4	13.8	15.0	-2.4	1.7	-6.1	-0.8	-4.2	-1.4
Illinois	13.2	9.5	4.9	2.9	2.1	-7.7	-1.5	-1.1	-3.2
New Jersey	15.1	5.2	4.0	4.1	4.9	-7.5	-1.8	-5.0	0.3
Washington	25.0	23.3	-1.6	-3.7	3.1	-8.6	-16.5	-1.6	-0.1
Ohio	13.9	6.4	5.8	6.0	2.5	-7.2	-2.4	-4.3	-2.5
Georgia	17.3	8.6	10.0	2.0	2.4	-8.2	-3.7	-2.2	-1.1
Michigan	21.6	4.9	3.7	2.9	1.9	-5.9	-3.9	-4.4	-3.9
North Carolina	12.2	11.2	9.2	3.3	2.8	-6.8	-2.3	-3.9	-2.3
Maryland	13.8	175.0	-59.3	9.2	3.5	-8.6	-1.8	-3.9	-2.3
Colorado	18.7	8.8	11.4	0.5	1.2	-6.1	-4.9	-2.5	0.3
Minnesota	13.7	7.9	8.3	4.9	4.5	-4.7	-0.9	-6.7	-2.9
Arizona	16.9	4.6	6.9	2.9	2.8	-7.5	-2.2	-1.8	-0.9
Connecticut	16.9	8.2	3.7	4.4	-0.2	-7.9	-1.7	-3.0	-2.5
Missouri	11.8	-24.2	47.9	5.6	3.1	-5.1	-2.3	-2.8	-1.5

1. Top 20 states by employment.
2. Figures converted from U.S. dollar data using an average annual exchange rate.

[r] Revised
[p] Preliminary

Source: BC Stats

Table 19. High Technology Sector Establishments,[1] by Development Region and Regional District, 2003-2006

Development Region / Regional District		2003 Mfg	2003 Service	2003 Total	2004 Mfg	2004 Service	2004 Total	2005 Mfg	2005 Service	2005 Total	2006 Mfg	2006 Service	2006 Total
Vancouver Island/Coast		**107**	**1,249**	**1,356**	**107**	**1,264**	**1,371**	**114**	**1,355**	**1,469**	**114**	**1,409**	**1,523**
23	Alberni-Clayoquot	2	21	23	3	21	24	3	24	27	3	29	32
17	Capital	62	819	881	59	795	854	66	853	919	66	898	964
45	Central Coast	0	4	4	0	3	3	0	3	3	0	3	3
25	Comox-Strathcona	17	106	123	16	126	142	16	132	148	16	136	152
19	Cowichan Valley	7	73	80	10	85	95	11	89	100	10	83	93
43	Mount Waddington	2	17	19	1	17	18	0	18	18	0	16	16
21	Nanaimo	17	191	208	18	197	215	18	213	231	19	224	243
27	Powell River	0	18	18	0	20	20	0	23	23	0	20	20
Mainland/Southwest		**548**	**5,111**	**5,659**	**557**	**5,156**	**5,713**	**569**	**5,364**	**5,933**	**580**	**5,675**	**6,255**
09	Fraser Valley	26	181	207	29	168	197	31	183	214	27	191	218
15	Greater Vancouver	514	4,833	5,347	518	4,882	5,400	528	5,077	5,605	544	5,381	5,925
31	Squamish-Lillooet	3	59	62	3	60	63	3	58	61	3	58	61
29	Sunshine Coast	5	38	43	7	46	53	7	46	53	6	45	51
Thompson/Okanagan		**78**	**563**	**641**	**75**	**557**	**632**	**86**	**595**	**681**	**80**	**641**	**721**
35	Central Okanagan	43	223	266	41	214	255	48	221	269	45	247	292
39	Columbia-Shuswap	4	58	62	3	61	64	3	66	69	2	66	68
37	North Okanagan	9	72	81	10	81	91	12	90	102	11	97	108
07	Okanagan-Similkameen	8	69	77	7	62	69	8	71	79	7	77	84
33	Thompson-Nicola	14	141	155	14	139	153	15	147	162	15	154	169
Kootenay		**18**	**189**	**207**	**16**	**191**	**207**	**16**	**194**	**210**	**14**	**202**	**216**
03	Central Kootenay	8	85	93	7	84	91	6	87	93	6	88	94
01	East Kootenay	4	65	69	3	66	69	4	64	68	3	75	78
05	Kootenay Boundary	6	39	45	6	41	47	6	43	49	5	39	44
Cariboo		**17**	**167**	**184**	**19**	**157**	**176**	**17**	**150**	**167**	**18**	**165**	**183**
41	Cariboo	5	62	67	5	66	71	3	60	63	4	74	78
53	Fraser-Fort George	12	105	117	14	91	105	14	90	104	14	91	105
North Coast		**3**	**48**	**51**	**2**	**45**	**47**	**1**	**49**	**50**	**2**	**52**	**54**
49	Kitimat-Stikine	2	36	38	2	32	34	1	34	35	2	35	37
47	Skeena-Queen Charlotte	1	12	13	0	13	13	0	15	15	0	17	17
Nechako		**4**	**50**	**54**	**5**	**48**	**53**	**5**	**53**	**58**	**4**	**52**	**56**
51	Bulkley-Nechako	4	50	54	5	47	52	5	51	56	4	50	54
57	Stikine	0	0	0	0	1	1	0	2	2	0	2	2
Northeast		**7**	**140**	**147**	**7**	**145**	**152**	**6**	**159**	**165**	**5**	**175**	**180**
55	Peace River	6	133	139	6	133	139	5	149	154	4	166	170
59	Northern Rockies	1	7	8	1	12	13	1	10	11	1	9	10
Total[2]		**783**	**7,524**	**8,307**	**789**	**7,580**	**8,369**	**815**	**7,933**	**8,748**	**820**	**8,386**	**9,206**

1. Establishments with zero employees are not included in these figures.
2. Figures do not add to totals because some establishments did not have geographic codes.

Source: BC Stats

Table 20. High Technology Sector Establishments,[1] by Industry, 1998-2006

Industry	1998	1999	2000	2001	2002	2003	2004	2005	2006
Manufacturing Industries	**838**	**871**	**859**	**826**	**809**	**783**	**789**	**815**	**820**
Service Industries	**6,028**	**6,552**	**7,241**	**7,526**	**7,443**	**7,524**	**7,580**	**7,933**	**8,386**
Motion picture production & post production	583	667	793	851	864	859	877	917	968
Telecommunications	207	213	231	255	240	235	219	219	308
Engineering services	1,934	1,956	1,930	1,845	1,792	1,795	1,793	1,862	1,939
Computer and related services	2,000	2,316	2,801	2,967	2,879	2,925	2,908	3,075	3,191
Other services	1,304	1,400	1,486	1,608	1,668	1,710	1,783	1,860	1,980
High Technology Sector	**6,866**	**7,423**	**8,100**	**8,352**	**8,252**	**8,307**	**8,369**	**8,748**	**9,206**

	% change from previous year[2]							
Industry	1999	2000	2001	2002	2003	2004	2005	2006
Manufacturing Industries	**3.9**	**-1.4**	**-3.8**	**-2.1**	**-3.2**	**0.8**	**3.3**	**0.6**
Service Industries	**8.7**	**10.5**	**3.9**	**-1.1**	**1.1**	**0.7**	**4.7**	**5.7**
Motion picture production & post production	14.4	18.9	7.3	1.5	-0.6	2.1	4.6	5.6
Telecommunications	2.9	8.5	10.4	-5.9	-2.1	-6.8	0.0	40.6
Engineering services	1.1	-1.3	-4.4	-2.9	0.2	-0.1	3.8	4.1
Computer and related services	15.8	20.9	5.9	-3.0	1.6	-0.6	5.7	3.8
Other services	7.4	6.1	8.2	3.7	2.5	4.3	4.3	6.5
High Technology Sector	**8.1**	**9.1**	**3.1**	**-1.2**	**0.7**	**0.7**	**4.5**	**5.2**

1. Establishments with zero employees are not included in these figures.
2. Note that there is a slight data break between 2005 and 2006 for the "Telecommunications" and "Computer and Related Services" industry groups. As such, growth rates should be used with caution. See Appendix A for details.

' Revised

Source: BC Stats and Statistics Canada

Table 21. High Technology Sector Establishments, by Industry and Establishment Size, 2006

	Number of establishments, by number of employees							
Industry	1 to 4	5 to 9	10 to 19	20 to 49	50 plus	Subtotal	None	Total
Manufacturing Industries	**443**	**107**	**95**	**90**	**85**	**820**	**474**	**1,294**
Service Industries	**5,738**	**1,099**	**689**	**509**	**351**	**8,386**	**12,794**	**21,180**
Motion picture production & post production	730	104	70	36	28	968	1,859	2,827
Telecommunications	163	49	28	38	30	308	243	551
Engineering services	1,229	311	186	145	68	1,939	2,339	4,278
Computer and related services	2,321	334	232	164	140	3,191	5,329	8,520
Other services	1,295	301	173	126	85	1,980	3,024	5,004
Total for sector	**6,181**	**1,206**	**784**	**599**	**436**	**9,206**	**13,268**	**22,474**
Total for all Industries	**97,612**	**28,783**	**19,702**	**13,670**	**8,078**	**167,845**	**182,599**	**350,444**

Source: BC Stats and Statistics Canada

Table 22. Shipments and Exports of BC High Technology Goods and Total Processed Goods, 1996-2006

Value ($000,000)

	1996	1997	1998	1999	2000	2001	2002	2003[r]	2004[r]	2005[r]	2006[p]
High Technology Goods											
Total Shipments[1]	1,539	1,763	1,845	2,267	2,819	2,524	2,122	2,241	2,530	2,484	2,798
Exports	451	581	769	840	923	748	685	635	686	704	853
Exports as % of Shipments	29.3	33.0	41.7	37.1	32.7	29.6	32.3	28.3	27.1	28.3	30.5
Total Processed Goods											
Total Shipments[1]	32,932	33,496	31,757	36,679	40,699	38,303	38,610	39,691	42,303	41,140	42,049
Exports of Processed Goods[2]	21,255	21,783	20,874	23,955	25,175	22,869	22,534	20,879	23,577	22,580	22,774
Export Orientation (%)	64.5	65.0	65.7	65.3	61.9	59.7	58.4	52.6	55.7	54.9	54.2

% change from previous year

	1996	1997	1998	1999	2000	2001	2002	2003[r]	2004[r]	2005[r]	2006[p]
High Technology Goods											
Total Shipments	16.3	14.5	4.7	22.9	24.4	-10.4	-15.9	5.6	12.9	-1.8	12.6
Exports	10.8	29.0	32.3	9.2	9.9	-19.0	-8.5	-7.2	8.1	2.5	21.1
Total Processed Goods											
Total Shipments	-3.7	1.7	-5.2	15.5	11.0	-5.9	0.8	2.8	6.6	-2.8	2.2
Exports of Processed Goods	-6.9	2.5	-4.2	14.8	5.1	-9.2	-1.5	-7.3	12.9	-4.2	0.9

1. Total shipments represent revenues from all production, sales, services and related activities in the manufacturing sector.
2. "Processed goods" excludes selected agricultural, fish, logging, mining and energy products not produced by BC manufacturing industries.

[r] Revised
[p] Preliminary

Source: BC Stats and Statistics Canada

Table 23. Domestic Exports of High Technology Goods, by Destination and Mode of Transport, 1996-2006

Value ($ million)[1]

Destination	Mode of Transport[2]	1996	1997	1998	1999	2000	2001	2002	2003[r]	2004[r]	2005[r]	2006[p]
United States	Land	159.1	240.7	384.8	408.6	477.4	343.8	384.2	357.5	351.9	329.8	401.3
	Sea	1.7	5.6	3.4	5.2	1.5	1.4	0.0	0.0	0.0	0.0	0.0
	Air	127.9	168.1	208.4	266.2	294.1	251.2	173.9	149.2	157.2	156.2	185.4
	Total	**288.7**	**414.4**	**596.6**	**680.0**	**773.0**	**596.4**	**558.1**	**506.6**	**509.1**	**486.0**	**586.7**
Pacific Rim (total)	Land	12.3	14.9	8.5	6.8	0.4	1.0	7.5	4.4	1.5	0.6	0.2
	Sea	12.1	5.6	8.9	4.7	9.4	4.6	13.7	2.2	3.4	11.3	5.4
	Air	81.8	94.1	78.7	72.3	56.9	27.8	25.9	35.7	61.3	85.6	88.1
	Total	**106.2**	**114.6**	**96.1**	**83.8**	**66.8**	**33.3**	**47.2**	**42.3**	**66.3**	**97.4**	**93.7**
Japan	Land	3.1	2.7	0.0	0.4	0.1	0.3	4.5	1.7	0.3	0.3	0.2
	Sea	1.0	0.3	0.9	0.3	2.1	0.7	12.1	0.1	0.3	0.1	0.8
	Air	14.6	16.3	7.7	4.5	28.1	8.7	5.4	5.5	10.4	19.6	18.7
	Total	**18.7**	**19.3**	**8.6**	**5.2**	**30.4**	**9.7**	**22.0**	**7.3**	**11.1**	**20.0**	**19.7**
Pacific Rim (excluding Japan)	Land	9.2	12.2	8.5	6.4	0.3	0.7	3.1	2.7	1.2	0.3	0.0
	Sea	11.0	5.4	8.1	4.4	7.4	3.8	1.6	2.1	3.1	11.2	4.6
	Air	67.2	77.8	70.9	67.8	28.8	19.1	20.5	30.2	50.9	66.0	69.3
	Total	**87.4**	**95.3**	**87.5**	**78.6**	**36.4**	**23.6**	**25.1**	**35.0**	**55.2**	**77.4**	**74.0**
European Union	Land	0.1	1.5	5.7	0.2	1.6	3.0	0.5	0.3	5.2	0.5	0.4
	Sea	2.4	1.1	1.5	4.6	1.2	8.3	5.3	7.9	8.3	2.1	3.5
	Air	27.2	30.8	51.5	49.4	57.4	76.4	52.5	43.3	52.2	67.6	102.7
	Total	**29.7**	**33.4**	**58.7**	**54.2**	**60.3**	**87.8**	**58.3**	**51.5**	**65.7**	**70.2**	**106.6**
All Other Countries	Land	1.7	1.5	0.7	1.6	2.1	7.1	1.6	1.3	2.3	0.7	5.2
	Sea	1.9	3.0	1.4	1.2	2.6	9.1	1.9	2.3	2.9	2.0	2.7
	Air	22.4	14.3	15.8	19.3	18.3	14.3	17.5	31.1	40.2	47.6	57.7
	Total	**26.0**	**18.9**	**17.9**	**22.0**	**23.0**	**30.6**	**21.0**	**34.7**	**45.4**	**50.3**	**65.6**
Total	Land	173.2	258.8	399.7	417.2	481.6	354.9	393.8	363.5	360.9	331.5	407.1
	Sea	18.1	15.3	15.2	15.7	14.7	23.4	20.9	12.4	14.7	15.3	11.6
	Air	259.4	307.3	354.4	407.2	426.7	369.8	269.9	259.2	311.0	357.1	433.8
	Total	**450.6**	**581.4**	**769.2**	**840.1**	**923.1**	**748.1**	**684.6**	**635.2**	**686.5**	**703.9**	**852.6**

% of Exports to Destination[3]

Destination	Mode of Transport	1996	1997	1998	1999	2000	2001	2002	2003[r]	2004[r]	2005[r]	2006[p]
United States	Land	55.1	58.1	64.5	60.1	61.8	57.6	68.8	70.6	69.1	67.9	68.4
	Sea	0.6	1.4	0.6	0.8	0.2	0.2	0.0	0.0	0.0	0.0	0.0
	Air	44.3	40.6	34.9	39.1	38.0	42.1	31.2	29.4	30.9	32.1	31.6
Pacific Rim (total)	Land	11.6	13.0	8.9	8.1	0.7	3.0	16.0	10.4	2.3	0.6	0.2
	Sea	11.4	4.9	9.3	5.6	14.1	13.7	29.1	5.2	5.1	11.6	5.8
	Air	77.1	82.1	81.8	86.3	85.2	83.3	54.9	84.4	92.5	87.9	94.0
Japan	Land	16.6	14.2	0.0	8.3	0.5	3.1	20.3	23.7	2.8	1.5	0.8
	Sea	5.5	1.3	10.0	5.1	6.8	7.7	55.1	1.5	2.7	0.3	4.0
	Air	77.9	84.5	89.9	86.6	92.7	89.2	24.6	74.7	94.4	98.2	95.2
Pacific Rim (excluding Japan)	Land	10.5	12.8	9.7	8.1	0.8	2.9	12.2	7.6	2.2	0.3	0.0
	Sea	12.6	5.6	9.2	5.6	20.2	16.2	6.4	5.9	5.6	14.5	6.3
	Air	76.9	81.6	81.0	86.3	78.9	81.0	81.5	86.5	92.2	85.2	93.7
European Union	Land	0.4	4.6	9.6	0.5	2.7	3.5	0.8	0.7	7.9	0.7	0.4
	Sea	8.0	3.2	2.6	8.5	2.0	9.5	9.1	15.3	12.7	3.0	3.3
	Air	91.6	92.2	87.8	91.0	95.3	87.0	90.2	84.1	79.4	96.3	96.3
All Other Countries	Land	6.6	8.2	3.8	7.1	9.2	23.4	7.7	3.9	5.0	1.3	7.9
	Sea	7.2	16.0	7.6	5.4	11.2	29.8	8.8	6.7	6.3	3.9	4.1
	Air	86.1	75.8	88.5	87.5	79.6	46.8	83.5	89.4	88.7	94.8	88.0
Total	Land	38.4	44.5	52.0	49.7	52.2	47.4	57.5	57.2	52.6	47.1	47.7
	Sea	4.0	2.6	2.0	1.9	1.6	3.1	3.0	1.9	2.1	2.2	1.4
	Air	57.6	52.9	46.1	48.5	46.2	49.4	39.4	40.8	45.3	50.7	50.9

1. Totals may not equal the sum of Land, Sea and Air due to the fact that some respondents did not fill in the survey completely.
2. Shipments by land to overseas markets represent the export of BC produced high technology products transshipped by US Ports such as Seattle or Portland.
3. Percentages may not add to 100 due to rounding.

[r] Revised
[p] Preliminary

Source: BC Stats

Table 24. Top 25 High Technology Export Commodities, 2006[P]

HS Code	Commodity Description [1]	Value ($000,000)	% Total Exports
88033000	Aircraft parts nes	128.4	15.1
90181900	Electro-diagnostic apparatus, nes	83.7	9.8
90328900	Automatic regulating or controlling instruments and apparatus, nes	67.9	8.0
84714900	Other digital automatic data processing machines, presented in the form of systems	50.4	5.9
85252000	Transmission apparatus, for radioteleph incorporating reception apparatus	34.5	4.0
85254000	Still image video cameras and other video camera recorders;digital cameras	34.2	4.0
84733000	Parts and accessories of automatic data processing machines & units thereof	31.9	3.7
90213900	Artificial parts of the body, nes	21.4	2.5
90181200	Ultrasonic scanning apparatus	20.9	2.5
88023000	Aircraft nes of an unladen weight > 2,000 kg but not exceeding 15,000 kg	19.0	2.2
84719000	Other data processing machines, nes	18.9	2.2
84718000	Other units for automatic data processing machines	18.7	2.2
90148000	Navigational instruments and appliances nes	18.0	2.1
85243190	Rec disc laser reading syst for repro phenomena o/t sound/image,o/t software,nes	17.8	2.1
85269200	Radio remote control apparatus	15.6	1.8
28444019	Radioactive elements & isotopes and compounds, nes	15.5	1.8
90158000	Surveying, hydrographic, oceanographic, meteorological or geophysical inst nes	14.8	1.7
90319000	Parts and accessories for measuring or checking inst, appl and machines, nes	14.5	1.7
90189000	Instruments and appliances used in medical or veterinary sciences, nes	14.4	1.7
85253000	Television cameras	14.3	1.7
85269100	Radio navigational aid apparatus	10.6	1.2
85251000	Transmission apparatus for radio-teleph radio-broadcasting or television	10.5	1.2
85243900	Recorded discs for laser reading systems, nes	9.3	1.1
88032000	Aircraft under-carriages and parts thereof	9.1	1.1
90303900	Inst & app, for measuring or checking voltage, current, etc without a recording device	8.4	1.0
Subtotal		**702.8**	**82.4**
	All Other High Technology Commodities	149.7	17.6
Total		**852.6**	**100.0**

HS code = Harmonized System commodity code; NES=Not Elsewhere Specified
1. Commodity descriptions are drawn from the approved Harmonized System coding manual. They contain some abbreviations that have been left in the original form in this table.

[P] Preliminary

Source: BC Stats and Statistics Canada

Table 25. Top 25 High Technology Import Commodities, 2006[P]

HS Code	Commodity Description [1]	Value ($000,000)	% Total Imports
8525200092	Cellular telephones other than designed for installation in motor vehicles	250.6	5.2
8471300000	Portable digital auto data process mach, not more than 10 kg, w CPU, keybrd & display	250.5	5.2
8528128300	Colour, high definition, television receivers, with flat panel screen, nes	196.7	4.1
8471500090	Digital process units, o/t 8471.41/49, w/n cntg strg,input/output o/t w CRT, nes	186.6	3.9
8803300000	Parts of airplanes or helicopters nes	162.0	3.4
3004900079	Medicaments nes, for human use, in dosage	144.0	3.0
8525400010	Still image video cameras and other video camera recorders, colour	132.1	2.8
8802400014	Airplanes,passenger, non military, of an unladen weight >15000kg,new	131.2	2.7
8473302000	Printed circuit assemblies of the machines of heading 84.71[2]	126.4	2.6
8517901030	Parts, printed circuit asy, of goods of TI 8517.11.00, 8517.19.10 , 8517.19.90,etc.[3]	126.1	2.6
8471801000	Control or adapter units, o/t form of system	115.9	2.4
8473309000	Parts & access (o/t printed circuit assy) of the machines of heading 84.71, nes	115.6	2.4
8471603900	Other display units, other than system, nes	84.1	1.8
8542219011	Unmounted chips, dice and wafers, silicon, metal oxide semicon (MOS)	77.9	1.6
8526910099	Radio navigational aid apparatus, nes	73.3	1.5
8521901000	Laser video disc players, w/n incorp video tuner	57.1	1.2
8517901040	Printed circuit assemblies of goods of TI 8517.22.00, 8517.30.20, 8517.50.49, 8517.80.:	55.3	1.2
8473301000	Parts, o/t printed circuit asy, of printers w/n cntg storage units in same housing	52.3	1.1
8471700013	Other hard magnetic disk drive units, o/t presented in form of system	51.6	1.1
8524391000	Recorded discs (software),for reproducing image only, other than magnetic, nes	51.5	1.1
8526920090	Radio remote control apparatus, nes	50.9	1.1
8517504900	Electrical apparatus, for digital line systems, nes	50.0	1.0
8528129600	Colour television receivers, with flat panel screen, nes	49.5	1.0
8411910021	Parts of turbojet or turbopropeller for civil aircraft	48.0	1.0
8471491090	Digital process units,w/n cntg in same hsng,strg unit,in/output,o/t with CRT,nes	41.8	0.9
Subtotal		**2,680.8**	**56.2**
	All Other High Technology Commodities	2,092.9	43.8
Total		**4,773.7**	**100.0**

HS code = Harmonized System commodity code; NES=Not Elsewhere Specified
1. Commodity descriptions are drawn from the approved Harmonized System coding manual. They contain some abbreviations that have been left in the original form in this table.
2. Refers to automatic data processing machines, magnetic or optical readers, etc.
3. Refers to telephone sets, videophones.
4. Refers to teleprinters, telegraphic switching apparatus, other telegraphic apparatus

[P] Preliminary

Source: BC Stats

Table 26. Domestic Exports of High Technology Goods and Total Goods, by Destination 1996-2006

Value ($000,000)

	1996	1997	1998	1999	2000	2001	2002	2003r	2004r	2005r	2006p
High Technology Exports[1]											
United States	288.7	414.4	596.6	680.0	773.0	596.4	558.1	506.6	509.1	486.0	586.7
Mexico	0.9	0.6	1.1	3.1	0.9	0.9	1.7	1.9	3.6	4.6	4.8
European Union	29.7	33.4	58.7	54.2	60.3	87.8	58.3	51.5	65.7	70.2	106.6
United Kingdom	*8.7*	*7.9*	*6.9*	*6.9*	*13.0*	*20.4*	*21.9*	*16.0*	*19.3*	*15.4*	*17.0*
France	*2.6*	*5.9*	*6.6*	*6.7*	*1.5*	*5.3*	*4.0*	*4.7*	*9.5*	*7.9*	*5.9*
Germany	*5.0*	*4.5*	*13.7*	*6.2*	*5.2*	*7.1*	*7.3*	*8.0*	*9.5*	*10.4*	*14.6*
Italy	*3.2*	*0.6*	*2.5*	*2.2*	*18.5*	*31.6*	*2.9*	*3.6*	*4.6*	*9.4*	*22.5*
Netherlands	*3.2*	*8.2*	*11.3*	*9.1*	*5.0*	*5.2*	*2.8*	*3.4*	*6.0*	*6.8*	*6.5*
Pacific Rim	106.2	114.6	96.1	83.8	66.8	33.3	47.2	42.3	66.3	97.4	93.7
Hong Kong	*13.6*	*21.9*	*32.0*	*12.0*	*6.5*	*6.2*	*3.3*	*6.2*	*10.9*	*14.9*	*9.8*
Mainland China	*16.4*	*20.1*	*27.1*	*17.7*	*2.3*	*3.0*	*4.1*	*10.3*	*14.5*	*23.3*	*17.6*
Japan	*18.7*	*19.3*	*8.6*	*5.2*	*30.4*	*9.7*	*22.0*	*7.3*	*11.1*	*20.0*	*19.7*
South Korea	*8.7*	*16.7*	*4.6*	*11.9*	*9.1*	*6.2*	*4.3*	*2.5*	*7.6*	*8.1*	*10.6*
Taiwan	*8.7*	*12.2*	*14.9*	*24.2*	*4.3*	*2.2*	*4.3*	*5.8*	*3.1*	*7.5*	*7.1*
All Other Countries	25.1	18.2	16.8	18.9	22.1	29.7	19.3	32.8	41.8	45.6	60.8
Total	**450.6**	**581.4**	**769.2**	**840.1**	**923.1**	**748.1**	**684.6**	**635.2**	**686.5**	**703.9**	**852.6**
Total Exports											
United States	13,884.1	14,858.5	16,375.0	19,370.7	22,196.0	22,104.4	19,665.8	18,792.3	20,121.2	22,034.2	20,463.0
Mexico	*50.5*	*61.9*	*60.7*	*42.2*	*57.7*	*83.2*	*79.0*	*108.6*	*198.3*	*237.0*	*185.0*
European Union	1,993.7	2,105.9	2,027.5	1,942.3	2,597.7	2,143.6	1,817.8	1,882.9	2,186.0	2,452.8	2,267.1
United Kingdom	336.4	288.7	302.5	319.2	381.2	355.0	337.0	305.6	341.3	421.0	386.2
France	*182.3*	*183.5*	*175.8*	*167.1*	*217.0*	*167.9*	*149.7*	*165.2*	*180.5*	*189.5*	*152.4*
Germany	*409.1*	*475.6*	*395.6*	*299.7*	*534.5*	*382.4*	*320.9*	*380.6*	*428.3*	*470.6*	*446.9*
Italy	*435.5*	*474.1*	*439.1*	*445.6*	*617.1*	*532.8*	*428.6*	*467.0*	*463.0*	*565.9*	*471.1*
Netherlands	*164.1*	*204.3*	*251.5*	*235.3*	*174.6*	*211.9*	*222.8*	*228.0*	*325.1*	*300.7*	*374.6*
Pacific Rim	*9,189.2*	*8,966.2*	*6,866.8*	*7,110.3*	*8,065.7*	*6,582.5*	*6,528.8*	*6,635.9*	*7,470.6*	*8,077.5*	*9,033.9*
Hong Kong	244.2	344.8	261.7	265.0	277.8	217.8	207.7	179.8	252.1	213.2	199.2
Mainland China	*507.8*	*449.2*	*458.0*	*582.3*	*706.4*	*726.8*	*756.3*	*919.5*	*1,225.4*	*1,325.5*	*1,485.7*
Japan	*6,403.8*	*6,002.4*	*4,539.8*	*4,466.7*	*4,890.8*	*4,066.1*	*3,858.5*	*3,660.0*	*3,805.1*	*4,163.8*	*4,706.2*
South Korea	*866.1*	*939.3*	*654.3*	*737.3*	*895.0*	*712.2*	*725.1*	*777.4*	*909.6*	*1,167.7*	*1,364.5*
Taiwan	*339.7*	*431.2*	*349.2*	*352.0*	*402.2*	*314.9*	*339.3*	*433.0*	*486.7*	*498.8*	*520.7*
All Other Countries	599.0	706.1	612.1	578.3	722.3	765.9	737.0	844.6	1,015.4	1,299.8	1,466.1
Total	**25,716.6**	**26,698.6**	**25,942.1**	**29,043.8**	**33,639.4**	**31,679.7**	**28,828.4**	**28,264.4**	**30,991.6**	**34,101.4**	**33,415.1**

% change from previous year

	1997	1998	1999	2000	2001	2002	2003r	2004r	2005r	2006p
High Technology Exports										
United States	43.5	44.0	14.0	13.7	-22.8	-6.4	-9.2	0.5	-4.5	20.7
Mexico	-32.2	76.5	191.4	-69.9	-5.8	93.4	9.5	88.7	30.2	3.7
European Union	12.7	75.4	-7.5	11.1	45.7	-33.7	-11.6	27.6	6.9	51.8
United Kingdom	*-9.0*	*-13.1*	*0.2*	*87.7*	*57.4*	*7.3*	*-26.8*	*20.6*	*-20.6*	*10.4*
France	*125.2*	*11.5*	*0.8*	*-77.6*	*253.7*	*-24.1*	*17.3*	*102.7*	*-17.5*	*-24.5*
Germany	*-10.1*	*201.7*	*-54.4*	*-15.9*	*34.8*	*3.4*	*9.9*	*18.4*	*9.7*	*40.4*
Italy	*-82.7*	*355.6*	*-11.3*	*725.8*	*70.8*	*-90.7*	*23.2*	*26.7*	*104.2*	*140.0*
Netherlands	*156.4*	*37.1*	*-19.4*	*-44.6*	*4.2*	*-45.9*	*20.2*	*75.4*	*13.6*	*-4.1*
Pacific Rim	8.0	-16.1	-12.8	-20.3	-50.1	41.5	-10.3	56.6	46.9	-3.8
Hong Kong	*60.8*	*46.3*	*-62.4*	*-45.7*	*-5.2*	*-46.3*	*86.6*	*74.6*	*37.0*	*-34.0*
Mainland China	*23.1*	*34.9*	*-34.9*	*-87.0*	*29.5*	*36.6*	*152.5*	*40.5*	*60.8*	*-24.1*
Japan	*2.9*	*-55.4*	*-39.5*	*483.0*	*-68.0*	*127.1*	*-66.6*	*50.5*	*80.8*	*-1.5*
South Korea	*92.6*	*-72.2*	*157.9*	*-23.9*	*-31.5*	*-31.5*	*-41.3*	*205.8*	*6.0*	*30.3*
Taiwan	*40.7*	*21.6*	*62.7*	*-82.4*	*-48.1*	*94.4*	*34.2*	*-46.0*	*139.9*	*-5.3*
All Other Countries	-27.4	-8.0	12.6	16.9	34.2	-35.0	70.1	27.4	9.1	33.2
Total Growth	**29.0**	**32.3**	**9.2**	**9.9**	**-19.0**	**-8.5**	**-7.2**	**8.1**	**2.5**	**21.1**
Total Exports										
United States	7.0	10.2	18.3	14.6	-0.4	-11.0	-4.4	7.1	9.5	-7.1
Mexico	22.8	-2.0	-30.5	36.7	44.3	-5.1	37.4	82.7	19.5	-21.9
European Union	5.6	-3.7	-4.2	33.7	-17.5	-15.2	3.6	16.1	12.2	-7.6
United Kingdom	*-14.2*	*4.8*	*5.5*	*19.4*	*-6.9*	*-5.1*	*-9.3*	*11.7*	*23.3*	*-8.3*
France	*0.6*	*-4.2*	*-4.9*	*29.9*	*-22.6*	*-10.9*	*10.3*	*9.3*	*5.0*	*-19.6*
Germany	*16.2*	*-16.8*	*-24.2*	*78.4*	*-28.5*	*-16.1*	*18.6*	*12.5*	*9.9*	*-5.0*
Italy	*8.9*	*-7.4*	*1.5*	*38.5*	*-13.7*	*-19.6*	*9.0*	*-0.9*	*22.2*	*-16.7*
Netherlands	*24.6*	*23.1*	*-6.4*	*-25.8*	*21.3*	*5.1*	*2.3*	*42.6*	*-7.5*	*24.6*
Pacific Rim	-2.4	-23.4	3.5	13.4	-18.4	-0.8	1.6	12.6	8.1	11.8
Hong Kong	*41.2*	*-24.1*	*1.3*	*4.8*	*-21.6*	*-4.6*	*-13.4*	*40.2*	*-15.5*	*-6.5*
Mainland China	*-11.5*	*2.0*	*27.2*	*21.3*	*2.9*	*4.1*	*21.6*	*33.3*	*8.2*	*12.1*
Japan	*-6.3*	*-24.4*	*-1.6*	*9.5*	*-16.9*	*-5.1*	*-5.1*	*4.0*	*9.4*	*13.0*
South Korea	*8.5*	*-30.3*	*12.7*	*21.4*	*-20.4*	*1.8*	*7.2*	*17.0*	*28.4*	*16.9*
Taiwan	*26.9*	*-19.0*	*0.8*	*14.3*	*-21.7*	*7.8*	*27.6*	*12.4*	*2.5*	*4.4*
All Other Countries	17.9	-13.3	-5.5	24.9	6.0	-3.8	14.6	20.2	28.0	12.8
Total Growth	**3.8**	**-2.8**	**12.0**	**15.8**	**-5.8**	**-9.0**	**-2.0**	**9.6**	**10.0**	**-2.0**

1. High technology exports reflect exports of high technology commodities produced by the manufacturing portion of the high technology sector; exports from the high technology service industries are not included.

r Revised
p Preliminary

Source: BC Stats and Statistics Canada

Table 27. Imports of High Technology, by Country of Origin, 1996-2006

Value ($000,000)

	1996	1997	1998	1999	2000	2001	2002	2003r	2004r	2005r	2006p
United States	1,740.0	2,103.6	2,319.2	2,305.6	2,386.0	2,232.6	2,041.8	1,896.7	1,890.6	1,851.2	1,664.7
Mexico	72.6	84.5	88.7	126.3	169.4	203.9	240.7	251.3	326.5	382.1	472.9
European Union	306.3	511.1	499.9	668.5	658.1	779.5	677.8	487.5	464.7	411.2	443.7
United Kingdom	*84.5*	*89.2*	*102.6*	*144.0*	*324.2*	*165.8*	*152.0*	*146.2*	*146.7*	*121.2*	*116.7*
France	*109.2*	*284.1*	*243.5*	*360.9*	*145.9*	*360.1*	*251.2*	*114.9*	*91.6*	*54.2*	*71.0*
Germany	*49.5*	*49.9*	*58.5*	*69.1*	*70.7*	*106.7*	*86.8*	*82.7*	*97.2*	*95.6*	*100.3*
Italy	*9.4*	*13.5*	*13.9*	*11.0*	*11.4*	*35.7*	*56.2*	*32.8*	*24.1*	*16.7*	*26.0*
Netherlands	*7.9*	*7.1*	*7.9*	*8.4*	*12.7*	*17.9*	*27.5*	*12.7*	*12.5*	*14.0*	*9.2*
Pacific Rim	608.0	830.8	913.9	936.7	977.6	915.7	1,054.6	1,258.3	1,516.3	1,688.3	1,904.9
Hong Kong	*13.7*	*20.4*	*17.6*	*20.7*	*18.8*	*13.1*	*12.9*	*13.1*	*9.0*	*11.1*	*12.1*
Mainland China	*32.5*	*46.0*	*53.6*	*71.2*	*101.2*	*144.7*	*223.0*	*364.3*	*544.8*	*712.2*	*901.7*
Japan	*232.5*	*303.7*	*319.6*	*320.5*	*316.1*	*272.0*	*276.6*	*269.5*	*278.4*	*297.2*	*259.5*
South Korea	*69.0*	*80.0*	*75.7*	*77.3*	*99.5*	*86.3*	*94.9*	*143.0*	*169.1*	*174.5*	*152.4*
Taiwan	*76.7*	*123.0*	*160.7*	*175.2*	*165.4*	*157.6*	*159.4*	*140.0*	*149.1*	*143.8*	*159.1*
All Other Countries	116.0	128.7	156.4	212.3	284.0	348.9	291.1	212.9	242.3	318.7	287.6
Total Value	**2,842.9**	**3,658.8**	**3,978.1**	**4,249.3**	**4,475.0**	**4,480.6**	**4,306.1**	**4,106.8**	**4,440.4**	**4,651.5**	**4,773.7**

% change from previous year

	1997	1998	1999	2000	2001	2002	2003r	2004r	2005r	2006p
United States	20.9	10.3	-0.6	3.5	-6.4	-8.5	-7.1	-0.3	-2.1	-10.1
Mexico	16.5	5.0	42.3	34.1	20.4	18.0	4.4	29.9	17.0	23.8
European Union	66.9	-2.2	33.7	-1.6	18.4	-13.0	-28.1	-4.7	-11.5	7.9
United Kingdom	*5.6*	*15.0*	*40.4*	*125.1*	*-48.9*	*-8.3*	*-3.9*	*0.4*	*-17.4*	*-3.7*
France	*160.3*	*-14.3*	*48.2*	*-59.6*	*146.8*	*-30.3*	*-54.3*	*-20.3*	*-40.8*	*31.0*
Germany	*0.8*	*17.1*	*18.1*	*2.4*	*50.8*	*-18.6*	*-4.8*	*17.6*	*-1.7*	*5.0*
Italy	*44.4*	*3.2*	*-21.2*	*3.3*	*214.8*	*57.4*	*-41.6*	*-26.5*	*-30.6*	*55.7*
Netherlands	*-10.7*	*11.4*	*6.5*	*50.5*	*41.5*	*53.8*	*-53.8*	*-1.5*	*11.7*	*-34.5*
Pacific Rim	36.6	10.0	2.5	4.4	-6.3	15.2	19.3	20.5	11.3	12.8
Hong Kong	*49.5*	*-13.9*	*17.8*	*-9.4*	*-30.2*	*-1.7*	*1.8*	*-31.5*	*23.8*	*8.5*
Mainland China	*41.5*	*16.4*	*32.9*	*42.1*	*42.9*	*54.1*	*63.4*	*49.5*	*30.7*	*26.6*
Japan	*30.6*	*5.2*	*0.3*	*-1.4*	*-14.0*	*1.7*	*-2.6*	*3.3*	*6.7*	*-12.7*
South Korea	*15.9*	*-5.4*	*2.2*	*28.7*	*-13.2*	*10.0*	*50.6*	*18.2*	*3.2*	*-12.7*
Taiwan	*60.3*	*30.6*	*9.0*	*-5.6*	*-4.7*	*1.1*	*-12.2*	*6.5*	*-3.5*	*10.6*
All Other Countries	10.9	21.5	35.8	33.7	22.9	-16.6	-26.9	13.8	31.5	-9.8
Total Growth	**28.7**	**8.7**	**6.8**	**5.3**	**0.1**	**-3.9**	**-4.6**	**8.1**	**4.8**	**2.6**

r Revised
p Preliminary

Source: BC Stats

Table 28. Balance of Trade in High Technology Goods, by Country, 1996-2006

Balance ($000,000)

	1996	1997	1998	1999	2000	2001	2002	2003r	2004r	2005r	2006p
United States	-1,247.6	-1,497.3	-1,468.1	-1,228.2	-814.2	-1,364.5	-1,248.2	-1,168.6	-1,150.5	-1,120.4	-850.2
Mexico	-71.6	-83.9	-87.6	-122.9	-168.4	-202.7	-237.0	-247.6	-319.5	-374.0	-462.3
European Union	-271.2	-468.8	-431.8	-595.6	-546.4	-661.0	-596.2	-400.6	-355.0	-276.8	-247.2
United Kingdom	*-73.1*	*-78.1*	*-93.0*	*-133.8*	*-299.1*	*-121.9*	*-119.8*	*-115.6*	*-105.4*	*-86.2*	*-87.3*
France	*-105.9*	*-276.3*	*-234.7*	*-345.3*	*-128.6*	*-354.2*	*-245.8*	*-109.8*	*-78.6*	*-44.4*	*-41.6*
Germany	*-43.5*	*-43.5*	*-43.4*	*-60.2*	*-55.0*	*-98.4*	*-73.4*	*-69.8*	*-83.0*	*-65.0*	*-56.2*
Italy	*-6.1*	*-12.7*	*-11.2*	*-8.5*	*7.2*	*-1.4*	*-52.0*	*-28.9*	*-18.9*	*-7.2*	*-3.2*
Netherlands	*-4.4*	*1.3*	*4.3*	*1.7*	*-7.6*	*-12.6*	*-24.3*	*-7.0*	*-5.9*	*0.6*	*5.8*
Pacific Rim	-484.2	-686.3	-779.5	-793.9	-758.9	-805.7	-950.2	-1,095.1	-1,277.3	-1,385.3	-1,628.0
Hong Kong	*4.7*	*7.6*	*30.7*	*10.9*	*39.2*	*28.3*	*11.2*	*25.4*	*39.7*	*68.1*	*44.1*
Mainland China	*-16.1*	*-25.7*	*-25.7*	*-52.1*	*-88.4*	*-134.5*	*-215.5*	*-332.1*	*-515.9*	*-676.5*	*-868.6*
Japan	*-207.8*	*-275.9*	*-304.3*	*-303.3*	*-244.3*	*-246.7*	*-239.7*	*-240.1*	*-244.6*	*-246.1*	*-215.8*
South Korea	*-55.9*	*-58.7*	*-67.8*	*-55.3*	*-80.5*	*-75.6*	*-85.5*	*-133.8*	*-146.8*	*-157.6*	*-132.4*
Taiwan	*-67.6*	*-109.5*	*-140.3*	*-147.2*	*-156.4*	*-151.6*	*-154.1*	*-132.2*	*-139.4*	*-126.8*	*-144.1*
All Other Countries	-82.9	-106.1	-137.8	-186.7	-249.6	-311.3	-265.5	-173.6	-174.3	-222.0	-190.9
Total	**-2,157.4**	**-2,842.3**	**-2,904.7**	**-2,927.3**	**-2,537.5**	**-3,345.2**	**-3,297.0**	**-3,085.6**	**-3,276.6**	**-3,378.6**	**-3,378.6**

Note: The trade balance is the net of *total* exports minus total imports. Total exports include re-exports, whereas *domestic* exports are shipments of goods produced within Canada only (in the case of tables in this report, within BC only).

r Revised
p Preliminary

Source: BC Stats

Table 29. Domestic Exports of High Technology Goods, by Commodity Group, 1996-2006

Value ($000,000)

	1996	1997	1998	1999	2000	2001	2002	2003[r]	2004[r]	2005[r]	2006[p]
Biotechnology	0.8	1.0	2.2	2.4	1.5	1.6	1.7	2.0	4.3	7.9	7.2
Life Sciences	30.5	46.0	55.3	69.4	82.0	94.8	186.2	200.8	210.5	140.2	179.4
Opto-Electronics	24.7	35.6	51.4	91.5	167.5	121.1	70.9	35.3	34.0	35.7	37.1
Computers and Telecommunications	292.0	374.3	443.2	399.9	318.6	259.8	262.3	243.1	259.4	285.1	344.3
Electronics	17.5	17.1	13.0	9.5	14.2	18.1	4.6	4.1	8.9	15.4	14.1
Computer Integrated Manufacturing	32.0	37.4	40.8	44.5	51.6	56.3	47.5	62.5	97.5	104.2	101.0
Material Design	0.9	13.7	57.7	94.0	178.6	71.0	3.2	1.5	1.4	1.9	2.1
Aerospace	50.6	52.4	101.2	126.6	102.9	118.9	104.5	83.9	69.1	109.6	167.2
Weapons and Nuclear	1.5	4.0	4.4	2.3	6.3	6.5	3.9	2.0	1.4	4.1	0.1
Total	**450.6**	**581.4**	**769.2**	**840.1**	**923.1**	**748.1**	**684.6**	**635.2**	**686.5**	**703.9**	**852.6**

% change from previous year

	1997	1998	1999	2000	2001	2002	2003[r]	2004[r]	2005[r]	2006[p]
Biotechnology	21.6	128.5	8.9	-37.9	5.0	5.7	19.6	112.0	84.4	-8.5
Life Sciences	50.8	20.3	25.5	18.1	15.7	96.3	7.8	4.8	-33.4	28.0
Opto-Electronics	44.5	44.4	78.0	82.9	-27.7	-41.5	-50.3	-3.6	4.9	4.1
Computers and Telecommunications	28.2	18.4	-9.8	-20.3	-18.5	0.9	-7.3	6.7	9.9	20.8
Electronics	-2.4	-23.8	-26.8	48.5	27.6	-74.7	-9.7	114.3	72.9	-8.4
Computer Integrated Manufacturing	16.8	9.1	9.1	15.9	9.2	-15.7	31.6	56.1	6.9	-3.1
Material Design	1351.2	321.9	63.0	90.0	-60.3	-95.5	-53.1	-2.5	29.5	13.5
Aerospace	3.5	93.2	25.1	-18.7	15.6	-12.1	-19.7	-17.7	58.7	52.6
Weapons and Nuclear	159.2	10.2	-47.8	178.5	2.0	-40.2	-48.1	-29.9	191.0	-96.5
Total	**29.0**	**32.3**	**9.2**	**9.9**	**-19.0**	**-8.5**	**-7.2**	**8.1**	**2.5**	**21.1**

[r] Revised
[p] Preliminary

Source: BC Stats

Table 30. Imports of High Technology Goods, by Commodity Group, 1996-2006

Value ($000,000)

	1996	1997	1998	1999	2000	2001	2002	2003[r]	2004[r]	2005[r]	2006[p]
Biotechnology	24.6	21.6	32.5	33.8	33.7	57.6	49.3	42.5	37.9	40.5	50.2
Life Sciences	267.6	276.1	313.9	367.5	448.6	506.7	497.9	473.4	494.1	498.1	513.5
Opto-Electronics	78.1	96.3	97.4	93.6	121.8	123.7	117.2	106.7	126.0	186.7	293.2
Computers and Telecommunications	1,463.1	1,940.3	2,132.9	2,087.3	2,432.6	2,340.0	2,384.9	2,514.9	2,753.9	2,784.6	2,825.6
Electronics	371.7	545.2	680.0	676.9	547.7	333.4	367.8	325.2	400.1	424.3	394.1
Computer Integrated Manufacturing	145.2	183.3	133.8	153.0	186.9	166.3	189.6	200.6	196.1	183.0	180.1
Material Design	31.0	33.2	62.5	141.0	133.0	83.1	37.1	25.4	25.9	25.4	25.0
Aerospace	427.0	532.7	501.1	672.0	539.6	835.3	633.3	384.0	367.1	488.4	465.5
Weapons and Nuclear	34.7	30.2	24.1	24.2	31.2	34.5	29.1	34.2	39.4	20.4	26.4
Total	**2,842.9**	**3,658.8**	**3,978.1**	**4,249.3**	**4,475.0**	**4,480.6**	**4,306.1**	**4,106.8**	**4,440.4**	**4,651.5**	**4,773.7**

% change from previous year

	1997	1998	1999	2000	2001	2002	2003[r]	2004[r]	2005[r]	2006[p]
Biotechnology	-12.3	50.6	4.2	-0.4	71.0	-14.4	-13.8	-10.9	7.1	23.9
Life Sciences	3.2	13.7	17.1	22.1	13.0	-1.8	-4.9	4.4	0.8	3.1
Opto-Electronics	23.3	1.2	-3.9	30.0	1.6	-5.3	-8.9	18.0	48.2	57.0
Computers and Telecommunications	32.6	9.9	-2.1	16.5	-3.8	1.9	5.5	9.5	1.1	1.5
Electronics	46.7	24.7	-0.5	-19.1	-39.1	10.3	-11.6	23.0	6.1	-7.1
Computer Integrated Manufacturing	26.2	-27.0	14.3	22.1	-11.0	14.0	5.8	-2.2	-6.7	-1.6
Material Design	7.0	88.5	125.5	-5.7	-37.5	-55.3	-31.5	1.9	-1.9	-1.5
Aerospace	24.7	-5.9	34.1	-19.7	54.8	-24.2	-39.4	-4.4	33.0	-4.7
Weapons and Nuclear	-12.9	-20.1	0.3	29.1	10.6	-15.7	17.4	15.3	-48.1	29.2
Total	**28.7**	**8.7**	**6.8**	**5.3**	**0.1**	**-3.9**	**-4.6**	**8.1**	**4.8**	**2.6**

[r] Revised
[p] Preliminary

Source: BC Stats

Table 31. Balance of Trade in High Technology Goods, by Commodity Group, 1996-2006

Balance ($000,000)

	1996	1997	1998	1999	2000	2001	2002	2003[r]	2004[r]	2005[r]	2006[p]
Biotechnology	-23.7	-20.6	-30.2	-31.4	-32.2	-56.0	-47.6	-40.5	-33.6	-32.6	-43.0
Life Sciences	-235.9	-228.6	-256.8	-295.1	-363.5	-409.3	-307.6	-266.8	-276.1	-348.5	-327.6
Opto-Electronics	-51.6	-58.1	-44.9	-0.5	48.4	0.9	-42.8	-69.8	-89.1	-147.2	-252.1
Computers and Telecommunications	-1,087.5	-1,487.2	-1,621.8	-1,621.5	-2,032.5	-2,004.3	-2,043.9	-2,196.1	-2,420.5	-2,408.5	-2,373.3
Electronics	-286.3	-413.7	-455.0	-302.6	334.4	-51.3	-177.8	-83.3	-88.1	-61.6	-49.3
Computer Integrated Manufacturing	-110.5	-143.7	-90.7	-105.4	-127.2	-101.8	-137.4	-128.6	-87.6	-68.9	-64.9
Material Design	-29.4	-19.5	-4.8	-46.8	46.0	-7.5	-32.2	-22.0	-24.1	-21.5	-21.7
Aerospace	-299.5	-445.1	-382.5	-503.6	-388.1	-688.4	-483.3	-247.0	-222.9	-274.3	-221.3
Weapons and Nuclear	-32.9	-25.8	-17.9	-20.4	-22.7	-27.4	-24.3	-31.4	-34.7	-15.6	-25.6
Total	**-2,157.4**	**-2,842.3**	**-2,904.7**	**-2,927.3**	**-2,537.5**	**-3,345.2**	**-3,297.0**	**-3,085.6**	**-3,276.6**	**-3,378.6**	**-3,378.6**

Note: The trade balance is the net of *total* exports minus total imports. Total exports include re-exports, whereas *domestic* exports are shipments of goods produced within Canada only (in the case of tables in this report, within BC only).

[r] Revised
[p] Preliminary

Source: BC Stats

Table 32. Domestic Exports of High Technology Goods to the United States, by Commodity Group, 1996-2006

Value ($000,000)

	1996	1997	1998	1999	2000	2001	2002	2003r	2004r	2005r	2006p
Biotechnology	0.6	0.6	0.7	0.7	0.6	1.5	1.6	1.4	1.8	3.3	2.0
Life Sciences	23.6	40.0	45.4	59.6	71.5	85.8	167.6	174.5	172.2	103.4	124.1
Opto-Electronics	16.3	24.7	40.5	77.5	135.3	89.8	54.2	25.3	22.1	19.9	18.7
Computers and Telecommunications	173.1	244.7	314.8	285.0	250.9	206.7	219.0	186.4	197.4	203.0	229.0
Electronics	8.7	10.3	7.5	6.7	9.9	14.4	2.3	2.5	3.2	4.0	3.7
Computer Integrated Manufacturing	25.6	29.6	32.2	35.7	40.9	49.5	39.0	45.4	56.1	62.5	58.3
Material Design	0.8	13.7	57.3	93.9	178.3	50.3	3.1	1.2	1.3	1.5	0.9
Aerospace	39.4	47.3	94.2	120.2	83.9	92.5	70.0	69.1	54.5	88.2	149.9
Weapons and Nuclear	0.6	3.5	4.0	0.8	1.7	6.0	1.3	0.8	0.4	0.2	0.1
Total	**288.7**	**414.4**	**596.6**	**680.0**	**773.0**	**596.4**	**558.1**	**506.6**	**509.1**	**486.0**	**586.7**

% change from previous year

	1997	1998	1999	2000	2001	2002	2003r	2004r	2005r	2006p
Biotechnology	-0.5	10.5	2.3	-9.6	135.6	7.8	-12.9	32.6	83.2	-40.3
Life Sciences	69.4	13.4	31.4	20.0	19.9	95.5	4.1	-1.3	-40.0	20.1
Opto-Electronics	51.3	64.0	91.2	74.6	-33.6	-39.7	-53.4	-12.5	-10.1	-6.1
Computers and Telecommunications	41.4	28.6	-9.5	-12.0	-17.6	6.0	-14.9	5.9	2.8	12.8
Electronics	18.2	-27.5	-10.4	48.4	45.3	-84.1	8.9	29.0	25.4	-9.0
Computer Integrated Manufacturing	15.7	8.8	10.8	14.6	21.1	-21.2	16.5	23.5	11.3	-6.7
Material Design	1666.4	319.3	63.9	89.9	-71.8	-93.8	-63.2	13.6	14.6	-41.6
Aerospace	20.1	99.1	27.6	-30.2	10.3	-24.4	-1.2	-21.1	61.8	70.0
Weapons and Nuclear	451.1	16.5	-79.7	101.3	261.3	-78.5	-37.2	-50.2	-43.1	-54.3
Total	**43.5**	**44.0**	**14.0**	**13.7**	**-22.8**	**-6.4**	**-9.2**	**0.5**	**-4.5**	**20.7**

r Revised
p Preliminary

Source: BC Stats

Table 33. Imports of High Technology Goods from the United States, by Commodity Group, 1996-2006

Value ($000,000)

	1996	1997	1998	1999	2000	2001	2002	2003r	2004r	2005r	2006p
Biotechnology	12.3	11.2	17.2	21.6	16.2	21.8	21.5	19.9	19.4	19.4	22.7
Life Sciences	167.8	160.4	190.5	225.5	276.0	300.0	296.7	263.5	270.2	254.9	254.2
Opto-Electronics	37.8	50.2	50.7	47.6	59.5	51.9	45.2	31.7	37.1	30.6	36.4
Computers and Telecommunications	921.1	1,220.0	1,351.5	1,195.4	1,305.7	1,173.2	1,079.2	1,062.3	1,020.0	956.0	815.2
Electronics	169.2	253.3	312.2	298.8	238.7	154.9	177.6	145.3	174.4	205.2	143.1
Computer Integrated Manufacturing	101.0	139.6	99.6	115.2	137.3	119.4	130.3	131.2	127.8	106.1	116.4
Material Design	27.3	29.5	56.8	125.9	104.2	51.2	28.5	18.3	17.6	16.9	16.6
Aerospace	284.9	220.2	225.4	260.2	229.2	338.8	243.6	201.9	202.0	252.2	245.7
Weapons and Nuclear	18.5	19.1	15.3	15.3	19.2	21.4	19.3	22.6	22.1	10.1	14.3
Total	**1,740.0**	**2,103.6**	**2,319.2**	**2,305.6**	**2,386.0**	**2,232.6**	**2,041.8**	**1,896.7**	**1,890.6**	**1,851.2**	**1,664.7**

% change from previous year

	1997	1998	1999	2000	2001	2002	2003r	2004r	2005r	2006p
Biotechnology	-8.9	53.3	25.5	-25.1	34.6	-1.6	-7.3	-2.6	-0.1	17.5
Life Sciences	-4.4	18.7	18.4	22.4	8.7	-1.1	-11.2	2.5	-5.7	-0.3
Opto-Electronics	32.6	1.1	-6.0	25.0	-12.8	-12.8	-29.9	17.2	-17.6	18.9
Computers and Telecommunications	32.5	10.8	-11.5	9.2	-10.1	-8.0	-1.6	-4.0	-6.3	-14.7
Electronics	49.7	23.3	-4.3	-20.1	-35.1	14.6	-18.2	20.0	17.7	-30.2
Computer Integrated Manufacturing	38.2	-28.7	15.7	19.2	-13.1	9.2	0.7	-2.6	-17.0	9.7
Material Design	8.1	92.5	121.7	-17.3	-50.9	-44.3	-35.6	-4.1	-4.0	-1.7
Aerospace	-22.7	2.3	15.4	-11.9	47.8	-28.1	-17.1	0.1	24.8	-2.6
Weapons and Nuclear	3.1	-20.0	0.0	25.7	11.2	-10.0	17.2	-2.2	-54.4	42.3
Total	**20.9**	**10.3**	**-0.6**	**3.5**	**-6.4**	**-8.5**	**-7.1**	**-0.3**	**-2.1**	**-10.1**

r Revised
p Preliminary

Source: BC Stats

Table 34. Balance of Trade in High Technology Goods with the United States, by Commodity Group, 1996-2006

Balance ($000,000)

	1996	1997	1998	1999	2000	2001	2002	2003r	2004r	2005r	2006p
Biotechnology	-11.7	-10.6	-16.6	-20.9	-15.6	-20.3	-19.9	-18.5	-17.5	-15.9	-20.7
Life Sciences	-143.2	-119.4	-143.6	-163.1	-201.6	-212.0	-126.0	-85.1	-92.4	-146.4	-125.6
Opto-Electronics	-20.3	-23.6	-9.2	31.3	78.2	41.0	11.1	-5.3	-12.9	-7.6	-15.1
Computers and Telecommunications	-675.7	-910.9	-978.8	-856.0	-987.6	-900.6	-791.3	-816.0	-762.0	-683.4	-498.8
Electronics	-106.9	-150.2	-128.2	9.8	456.5	33.8	-49.5	-35.8	-33.6	-65.2	-32.2
Computer Integrated Manufacturing	-73.0	-107.9	-65.1	-76.6	-88.4	-62.0	-87.0	-77.3	-63.8	-36.7	-49.4
Material Design	-25.9	-15.8	0.6	-31.8	74.5	1.6	-23.7	-15.5	-16.1	-15.2	-15.2
Aerospace	-173.1	-143.7	-117.7	-107.6	-114.3	-231.2	-144.8	-93.6	-130.8	-140.5	-79.1
Weapons and Nuclear	-17.8	-15.3	-9.5	-13.3	-15.8	-14.8	-17.1	-21.6	-21.5	-9.6	-14.1
Total	**-1,247.6**	**-1,497.3**	**-1,468.1**	**-1,228.2**	**-814.2**	**-1,364.5**	**-1,248.2**	**-1,168.6**	**-1,150.5**	**-1,120.4**	**-850.2**

Note: The trade balance is the net of *total* exports minus total imports. Total exports include re-exports, whereas *domestic* exports are shipments of goods produced within Canada only (in the case of tables in this report, within BC only).

r Revised
p Preliminary

Source: BC Stats

Table 35. Domestic Exports of High Technology Goods to the Pacific Rim, by Commodity Group, 1996-2006

Value ($000,000)

	1996	1997	1998	1999	2000	2001	2002	2003[r]	2004[r]	2005[r]	2006[p]
Biotechnology	0.2	0.0	0.0	0.0	0.3	0.0	0.0	0.1	0.5	0.7	0.1
Life Sciences	3.7	2.8	2.6	3.5	4.0	2.8	1.9	4.9	7.7	13.1	13.0
Opto-Electronics	2.3	1.6	1.3	2.3	11.9	4.3	11.0	4.4	4.8	8.7	5.1
Computers and Telecommunications	88.5	98.7	80.4	68.7	37.8	18.4	14.5	20.1	29.4	39.9	45.0
Electronics	4.9	4.4	3.8	2.1	3.2	2.6	1.7	1.1	3.2	10.3	9.3
Computer Integrated Manufacturing	3.5	4.6	5.8	5.3	5.3	3.4	3.4	6.8	14.4	14.7	15.9
Material Design	0.1	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.1
Aerospace	2.3	2.3	2.1	1.5	2.2	1.6	13.1	4.0	6.0	6.2	5.0
Weapons and Nuclear	0.6	0.4	0.1	0.4	2.0	0.1	1.7	0.9	0.3	3.8	0.0
Total	**106.2**	**114.6**	**96.1**	**83.8**	**66.8**	**33.3**	**47.2**	**42.3**	**66.3**	**97.4**	**93.7**

% change from previous year

	1997	1998	1999	2000	2001	2002	2003[r]	2004[r]	2005[r]	2006[p]
Biotechnology	-100.0	-	42.5	1624.6	-91.7	-77.4	2547.2	235.8	46.5	-81.9
Life Sciences	-26.0	-5.0	33.7	15.2	-30.3	-33.0	159.8	57.7	68.9	-0.5
Opto-Electronics	-33.1	-16.0	75.7	418.2	-64.2	157.3	-60.2	9.2	82.0	-41.0
Computers and Telecommunications	11.6	-18.6	-14.4	-45.0	-51.3	-21.3	38.9	46.2	35.8	12.8
Electronics	-10.5	-13.6	-45.7	54.5	-20.1	-35.2	-35.3	194.3	225.9	-9.4
Computer Integrated Manufacturing	30.5	26.7	-8.4	0.0	-35.2	-1.6	101.2	112.3	2.1	8.6
Material Design	-96.7	2707.5	-100.0	-	830.4	-96.5	642.9	19.5	-43.4	323.2
Aerospace	-0.3	-10.0	-28.5	49.8	-26.3	699.1	-69.2	47.9	4.2	-19.9
Weapons and Nuclear	-43.6	-82.8	563.3	390.5	-96.6	2424.9	-50.2	-60.2	1003.7	-99.4
Total	**8.0**	**-16.1**	**-12.8**	**-20.3**	**-50.1**	**41.5**	**-10.3**	**56.6**	**46.9**	**-3.8**

[r] Revised
[p] Preliminary

Source: BC Stats

Table 36. Imports of High Technology Goods from the Pacific Rim, by Commodity Group, 1996-2006

Value ($000,000)

	1996	1997	1998	1999	2000	2001	2002	2003[r]	2004[r]	2005[r]	2006[p]
Biotechnology	0.5	0.3	1.3	2.2	3.0	2.0	1.3	1.3	1.3	0.8	0.9
Life Sciences	23.4	19.3	18.8	25.8	28.0	35.5	31.7	32.0	38.0	38.1	37.6
Opto-Electronics	34.5	41.2	41.4	40.1	53.5	58.9	56.1	60.6	69.4	97.8	110.9
Computers and Telecommunications	389.6	532.1	573.1	589.8	623.7	642.7	783.2	984.9	1,190.9	1,318.6	1,501.0
Electronics	130.5	206.7	243.2	231.9	212.5	122.7	138.4	129.0	163.9	162.4	189.5
Computer Integrated Manufacturing	20.7	22.1	18.5	20.9	25.6	20.2	24.8	34.4	28.0	38.1	26.2
Material Design	1.6	1.4	1.9	8.7	12.4	13.6	2.7	2.0	2.0	2.5	2.9
Aerospace	5.6	6.1	14.4	16.0	17.1	17.9	14.4	11.3	20.2	27.7	33.3
Weapons and Nuclear	1.6	1.6	1.4	1.5	1.7	2.2	2.1	2.7	2.7	2.4	2.5
Total	**608.0**	**830.8**	**913.9**	**936.7**	**977.6**	**915.7**	**1,054.6**	**1,258.3**	**1,516.3**	**1,688.3**	**1,904.9**

% change from previous year

	1997	1998	1999	2000	2001	2002	2003[r]	2004[r]	2005[r]	2006[p]
Biotechnology	-33.0	308.8	63.2	39.6	-34.8	-34.6	3.7	-6.0	-32.6	3.2
Life Sciences	-17.9	-2.4	37.1	8.8	26.6	-10.8	1.1	18.6	0.3	-1.2
Opto-Electronics	19.3	0.5	-3.2	33.7	10.1	-4.9	8.0	14.6	40.9	13.5
Computers and Telecommunications	36.6	7.7	2.9	5.8	3.0	21.9	25.7	20.9	10.7	13.8
Electronics	58.4	17.6	-4.6	-8.4	-42.3	12.8	-6.8	27.0	0.9	16.7
Computer Integrated Manufacturing	6.7	-16.2	12.8	22.3	-21.1	22.8	38.9	-18.6	35.9	-31.1
Material Design	-15.6	39.8	350.8	42.9	9.7	-80.4	-23.9	-2.7	26.7	16.6
Aerospace	9.6	133.7	11.3	6.9	4.9	-19.3	-21.9	79.3	36.7	20.3
Weapons and Nuclear	-0.2	-12.9	4.7	17.9	25.9	-5.1	31.8	0.0	-10.5	1.9
Total	**36.6**	**10.0**	**2.5**	**4.4**	**-6.3**	**15.2**	**19.3**	**20.5**	**11.3**	**12.8**

[r] Revised
[p] Preliminary

Source: BC Stats

Table 37. Balance of Trade in High Technology Goods with the Pacific Rim, by Commodity Group, 1996-2006

Balance ($000,000)

	1996	1997	1998	1999	2000	2001	2002	2003[r]	2004[r]	2005[r]	2006[p]
Biotechnology	-0.3	-0.3	-1.3	-2.2	-2.7	-2.0	-1.3	-1.2	-0.8	-0.1	-0.7
Life Sciences	-19.6	-16.1	-16.1	-22.1	-23.8	-32.5	-29.4	-26.1	-29.1	-24.4	-23.5
Opto-Electronics	-31.8	-39.3	-40.0	-37.7	-41.6	-54.6	-45.0	-56.2	-64.4	-88.8	-105.8
Computers and Telecommunications	-292.9	-422.3	-485.2	-514.0	-583.1	-620.8	-765.4	-956.2	-1,156.6	-1,272.1	-1,447.3
Electronics	-118.4	-187.4	-210.5	-181.0	-64.1	-51.2	-85.7	-21.7	-31.0	17.6	-17.0
Computer Integrated Manufacturing	-17.1	-17.5	-12.7	-15.6	-20.2	-16.7	-21.3	-27.2	-11.3	-21.9	-9.3
Material Design	-1.5	-1.4	-1.8	-8.7	-12.4	-11.4	-2.6	-2.0	-1.9	-2.2	-2.5
Aerospace	-1.6	-0.7	-10.6	-11.7	-11.4	-14.4	0.7	-2.9	20.1	5.3	-19.4
Weapons and Nuclear	-0.9	-1.2	-1.3	-0.9	0.5	-2.1	-0.3	-1.7	-2.3	1.4	-2.5
Total	**-484.2**	**-686.3**	**-779.5**	**-793.9**	**-758.9**	**-805.7**	**-950.2**	**-1,095.1**	**-1,277.3**	**-1,385.3**	**-1,628.0**

Note: The trade balance is the net of *total* exports minus total imports. Total exports include re-exports, whereas *domestic* exports are shipments of goods produced within Canada only (in the case of tables in this report, within BC only).

[r] Revised
[p] Preliminary

Source: BC Stats

Table 38. Domestic Exports of High Technology Goods to Mainland China, by Commodity Group, 1996-2006

Value ($000,000)

	1996	1997	1998	1999	2000	2001	2002	2003r	2004r	2005r	2006p
Biotechnology	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Life Sciences	0.0	0.1	0.4	0.2	0.4	1.5	0.8	3.0	2.0	6.2	6.3
Opto-Electronics	0.1	0.4	0.1	0.1	0.0	0.2	0.1	0.2	0.1	0.3	0.2
Computers and Telecommunications	16.1	19.1	22.8	17.1	1.5	1.2	1.9	4.6	9.4	11.9	8.4
Electronics	0.0	0.0	0.0	0.0	0.1	0.0	0.2	0.4	0.2	1.4	0.2
Computer Integrated Manufacturing	0.2	0.5	3.8	0.2	0.1	0.1	1.0	1.5	2.4	3.3	2.4
Material Design	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Aerospace	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.3	0.2	0.2
Weapons and Nuclear	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0	0.0
Total	**16.4**	**20.1**	**27.1**	**17.7**	**2.3**	**3.0**	**4.1**	**10.3**	**14.5**	**23.3**	**17.6**

% change from previous year

	1997	1998	1999	2000	2001	2002	2003r	2004r	2005r	2006p
Biotechnology	-	-	-	-	-100.0	-	-	302.7	116.4	80.9
Life Sciences	-	387.2	-45.7	66.3	281.7	-44.6	267.8	-32.3	207.3	1.3
Opto-Electronics	180.2	-74.5	-18.6	-41.3	269.7	-32.1	31.1	-22.5	137.0	-39.5
Computers and Telecommunications	18.9	19.7	-25.1	-91.1	-22.1	63.0	136.7	105.9	26.6	-29.4
Electronics	-	-100.0	-	89.9	-84.1	2111.9	49.8	-48.5	645.3	-87.3
Computer Integrated Manufacturing	238.6	624.4	-95.0	-57.0	-16.0	1298.3	62.2	53.7	37.9	-27.7
Material Design	-	-	-	-	-	-99.1	-100.0	-	-100.0	-
Aerospace	-	-100.0	-	-	-100.0	-	256.6	458.3	-30.4	-20.0
Weapons and Nuclear	-	-	-	-100.0	-	24093.5	4179.1	-95.6	-100.0	-
Total	**23.1**	**34.9**	**-34.9**	**-87.0**	**29.5**	**36.6**	**152.5**	**40.5**	**60.8**	**-24.1**

r Revised
p Preliminary

Source: BC Stats

Table 39. Imports of High Technology Goods from Mainland China, by Commodity Group, 1996-2006

Value ($000,000)

	1996	1997	1998	1999	2000	2001	2002	2003r	2004r	2005r	2006p
Biotechnology	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1	0.1	0.1	0.1
Life Sciences	2.3	2.8	2.7	4.5	5.7	7.8	8.3	7.7	9.4	6.6	6.5
Opto-Electronics	4.2	6.0	7.9	7.6	11.0	20.3	23.8	28.4	36.8	60.3	71.4
Computers and Telecommunications	24.4	34.7	39.8	55.2	79.6	110.3	183.4	318.6	481.6	625.0	799.5
Electronics	0.7	1.3	1.8	2.4	2.7	1.8	4.0	5.7	11.8	13.7	15.8
Computer Integrated Manufacturing	0.4	0.6	0.8	0.8	1.0	1.2	1.8	1.6	2.5	3.5	4.8
Material Design	0.0	0.0	0.0	0.1	0.4	2.0	0.4	0.5	0.7	1.1	1.4
Aerospace	0.3	0.3	0.3	0.3	0.4	0.5	0.4	0.6	0.8	1.1	1.3
Weapons and Nuclear	0.2	0.2	0.3	0.3	0.5	0.8	0.7	1.1	1.1	0.9	0.9
Total	**32.5**	**46.0**	**53.6**	**71.2**	**101.2**	**144.7**	**223.0**	**364.3**	**544.8**	**712.2**	**901.7**

% change from previous year

	1997	1998	1999	2000	2001	2002	2003r	2004r	2005r	2006p
Biotechnology	-42.7	154.7	48.0	123.6	22.3	91.5	-50.9	-19.8	74.4	-32.1
Life Sciences	21.2	-3.0	65.9	24.9	37.2	7.0	-7.3	21.2	-30.0	-0.1
Opto-Electronics	43.6	31.1	-4.3	45.0	85.1	17.5	19.3	29.6	63.8	18.5
Computers and Telecommunications	42.2	14.9	38.5	44.2	38.6	66.3	73.7	51.1	29.8	27.9
Electronics	83.4	32.4	36.6	12.3	-33.9	122.2	43.8	107.4	15.8	15.3
Computer Integrated Manufacturing	74.3	17.6	6.5	22.2	20.2	54.7	-13.1	60.5	39.2	34.8
Material Design	-34.7	20.1	235.1	615.3	435.7	-81.9	31.9	45.2	67.1	25.0
Aerospace	25.5	-10.5	7.8	18.4	42.0	-29.3	67.7	28.3	31.0	23.2
Weapons and Nuclear	-16.9	34.7	16.9	59.9	49.7	-6.2	51.6	-1.1	-18.7	1.6
Total	**41.5**	**16.4**	**32.9**	**42.1**	**42.9**	**54.1**	**63.4**	**49.5**	**30.7**	**26.6**

r Revised
p Preliminary

Source: BC Stats

Table 40. Balance of Trade in High Technology Goods with Mainland China, by Commodity Group, 1996-2006

Balance ($000,000)

	1996	1997	1998	1999	2000	2001	2002	2003r	2004r	2005r	2006p
Biotechnology	-2.3	-2.8	-2.7	-4.5	-5.5	-7.8	-8.3	-7.7	-9.4	-6.5	-6.5
Life Sciences	-4.2	-5.9	-7.4	-7.3	-10.6	-18.7	-22.9	-25.4	-33.9	-54.0	-64.9
Opto-Electronics	-24.2	-34.3	-39.7	-55.1	-79.5	-110.1	-183.3	-318.5	-481.5	-624.6	-799.3
Computers and Telecommunications	15.4	17.9	21.6	15.0	0.0	-0.6	-1.7	5.3	-1.1	0.4	-4.0
Electronics	-0.4	-0.6	-0.8	-0.7	8.3	3.6	1.3	13.7	8.2	6.8	6.6
Computer Integrated Manufacturing	0.1	0.5	3.8	0.1	-0.2	-1.9	0.6	1.4	3.3	2.8	1.2
Material Design	-0.3	-0.3	-0.3	-0.3	-0.4	1.6	-0.4	-0.6	-0.8	-1.1	-1.0
Aerospace	-0.2	-0.2	-0.2	0.6	-0.5	-0.5	-0.7	-0.8	-0.6	-0.2	-0.5
Weapons and Nuclear	-0.2	-0.2	-0.3	-0.3	-0.5	-0.8	-0.7	-0.5	-1.1	-0.9	-0.9
Total	**-16.1**	**-25.7**	**-25.7**	**-52.1**	**-88.4**	**-134.5**	**-215.5**	**-332.1**	**-515.9**	**-676.5**	**-868.6**

Note: The trade balance is the net of *total* exports minus total imports. Total exports include re-exports, whereas *domestic* exports are shipments of goods produced within Canada only (in the case of tables in this report, within BC only).

r Revised
p Preliminary

Source: BC Stats

Table 41. Domestic Exports of High Technology Goods to Japan, by Commodity Group, 1996-2006

Value ($000,000)

	1996	1997	1998	1999	2000	2001	2002	2003[r]	2004[r]	2005[r]	2006[p]
Biotechnology	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.3	0.4	0.0
Life Sciences	1.7	1.2	0.9	1.5	2.3	0.6	0.5	0.8	1.4	1.7	2.1
Opto-Electronics	0.5	0.2	0.2	0.6	8.8	1.2	9.3	1.1	1.3	5.2	1.1
Computers and Telecommunications	13.5	15.2	5.5	1.9	16.5	6.2	2.6	3.1	4.2	5.7	11.3
Electronics	1.3	1.5	1.0	0.2	0.4	1.4	1.0	0.1	0.2	0.2	1.0
Computer Integrated Manufacturing	1.3	0.6	0.0	0.2	0.0	0.1	0.1	0.4	3.1	2.4	3.9
Material Design	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Aerospace	0.0	0.3	0.9	0.7	0.4	0.2	8.6	1.8	0.5	0.6	0.2
Weapons and Nuclear	0.3	0.3	0.0	0.1	1.9	0.0	0.0	0.0	0.2	3.8	0.0
Total	**18.7**	**19.3**	**8.6**	**5.2**	**30.4**	**9.7**	**22.0**	**7.3**	**11.1**	**20.0**	**19.7**

% change from previous year

	1997	1998	1999	2000	2001	2002	2003[r]	2004[r]	2005[r]	2006[p]
Biotechnology	-100.0	-	-100.0	-	-100.0	-	-	326.3	52.1	-97.7
Life Sciences	-30.0	-23.8	66.5	53.1	-75.7	-10.5	60.3	73.0	27.8	18.9
Opto-Electronics	-56.3	-26.1	260.2	1343.6	-86.0	653.0	-88.5	18.3	306.6	-78.6
Computers and Telecommunications	12.2	-63.6	-66.2	784.3	-62.6	-58.1	21.0	34.6	36.6	97.2
Electronics	14.2	-34.0	-84.6	173.8	225.9	-31.2	-93.3	153.6	-3.3	541.7
Computer Integrated Manufacturing	-52.3	-93.9	428.7	-99.7	9357.1	10.6	448.0	788.7	-23.8	62.1
Material Design	-	-	-100.0	-	-	-100.0	-	20.7	-83.5	467.7
Aerospace	8435.7	199.2	-17.6	-50.0	-41.1	3770.8	-78.8	-73.6	15.5	-55.1
Weapons and Nuclear	-21.1	-95.3	1039.2	1247.7	-99.6	574.4	-0.9	215.1	2422.0	-99.8
Total	**2.9**	**-55.4**	**-39.5**	**483.0**	**-68.0**	**127.1**	**-66.6**	**50.5**	**80.8**	**-1.5**

[r] Revised
[p] Preliminary

Source: BC Stats

Table 42. Imports of High Technology Goods from Japan, by Commodity Group, 1996-2006

Value ($000,000)

	1996	1997	1998	1999	2000	2001	2002	2003[r]	2004[r]	2005[r]	2006[p]
Biotechnology	0.4	0.1	0.1	0.2	0.6	0.2	0.4	0.2	0.1	0.1	0.1
Life Sciences	10.7	10.1	11.3	14.3	14.6	17.1	16.3	16.3	18.4	20.9	21.0
Opto-Electronics	16.2	18.0	16.3	16.6	23.0	20.4	18.8	19.6	18.5	24.6	16.8
Computers and Telecommunications	144.4	198.8	204.5	192.6	178.8	164.6	178.4	173.9	182.5	179.9	153.4
Electronics	39.0	51.6	58.1	57.6	54.6	30.8	31.0	20.3	21.3	18.9	23.5
Computer Integrated Manufacturing	16.8	18.9	14.9	17.5	20.5	15.0	17.2	28.0	19.2	28.8	15.1
Material Design	1.3	1.3	1.5	7.0	7.9	7.5	1.5	1.1	0.8	0.7	1.0
Aerospace	3.0	4.0	12.4	14.3	15.3	15.4	12.1	9.2	16.6	22.5	27.8
Weapons and Nuclear	0.8	0.9	0.5	0.5	0.8	1.0	0.8	0.9	0.9	0.8	0.9
Total	**232.5**	**303.7**	**319.6**	**320.5**	**316.1**	**272.0**	**276.6**	**269.5**	**278.4**	**297.2**	**259.5**

% change from previous year

	1997	1998	1999	2000	2001	2002	2003[r]	2004[r]	2005[r]	2006[p]
Biotechnology	-62.3	-43.8	235.6	123.0	-56.8	46.4	-29.2	-64.7	-29.6	25.1
Life Sciences	-5.2	11.9	26.0	2.5	16.4	-4.3	-0.1	13.0	13.3	0.8
Opto-Electronics	11.1	-9.1	1.4	38.9	-11.1	-8.2	4.3	-5.3	33.0	-31.9
Computers and Telecommunications	37.7	2.8	-5.8	-7.1	-8.0	8.4	-2.5	5.0	-1.4	-14.8
Electronics	32.3	12.7	-1.0	-5.1	-43.6	0.7	-34.6	5.0	-11.3	24.4
Computer Integrated Manufacturing	12.5	-21.3	17.3	17.5	-26.7	14.2	63.3	-31.4	49.9	-47.5
Material Design	-0.5	15.2	380.4	12.1	-5.2	-79.3	-30.8	-26.9	-9.5	38.6
Aerospace	32.5	209.7	15.5	7.0	0.3	-20.9	-24.6	81.4	35.2	23.8
Weapons and Nuclear	13.9	-41.6	-9.0	63.4	35.0	-19.1	10.9	-0.4	-16.1	9.7
Total	**30.6**	**5.2**	**0.3**	**-1.4**	**-14.0**	**1.7**	**-2.6**	**3.3**	**6.7**	**-12.7**

[r] Revised
[p] Preliminary

Source: BC Stats

Table 43. Balance of Trade in High Technology Goods with Japan, by Commodity Group, 1996-2006

Balance ($000,000)

	1996	1997	1998	1999	2000	2001	2002	2003[r]	2004[r]	2005[r]	2006[p]
Biotechnology	-10.7	-10.1	-11.3	-14.3	-14.6	-17.1	-16.3	-16.2	-18.1	-20.5	-21.0
Life Sciences	-14.5	-16.8	-15.4	-15.0	-20.6	-19.9	-18.1	-18.3	-17.0	-22.6	-14.3
Opto-Electronics	-143.6	-198.4	-204.3	-192.0	-170.0	-163.3	-169.0	-172.8	-181.3	-174.7	-152.3
Computers and Telecommunications	-21.8	-31.4	-52.4	-55.5	-38.0	-23.9	-28.0	-16.6	-16.4	-12.4	-11.8
Electronics	-13.9	-14.4	-8.4	-5.9	20.8	1.0	-2.1	-7.2	2.8	1.0	8.4
Computer Integrated Manufacturing	0.1	-0.6	-1.4	-6.8	-7.9	-7.4	-1.5	-0.7	2.4	1.7	3.1
Material Design	-3.0	-4.0	-12.3	-14.3	-15.3	-15.3	-12.1	-9.1	-16.6	-22.4	-27.8
Aerospace	-0.4	-0.2	1.4	0.6	-0.1	-0.6	7.8	1.0	-0.3	0.1	-0.1
Weapons and Nuclear	-0.4	-0.6	-0.5	-0.3	1.2	-1.0	-0.8	-0.9	-0.8	3.0	-0.8
Total	**-207.8**	**-275.9**	**-304.3**	**-303.3**	**-244.3**	**-246.7**	**-239.7**	**-240.1**	**-244.6**	**-246.1**	**-215.8**

Note: The trade balance is the net of *total* exports minus total imports. Total exports include re-exports, whereas *domestic* exports are shipments of goods produced within Canada only (in the case of tables in this report, within BC only).

[r] Revised
[p] Preliminary

Source: BC Stats

Table 44. Domestic Exports of High Technology Goods to the European Union, by Commodity Group, 1996-2006

Value ($000,000)

	1996	1997	1998	1999	2000	2001	2002	2003[r]	2004[r]	2005[r]	2006[p]
Biotechnology	0.0	0.1	1.3	0.1	0.0	0.0	0.1	0.3	1.0	1.4	0.8
Life Sciences	2.0	2.1	4.4	4.8	4.3	4.0	11.8	17.3	26.9	19.7	32.7
Opto-Electronics	2.1	5.4	7.1	8.7	17.3	24.4	3.4	3.0	3.2	3.6	5.4
Computers and Telecommunications	21.6	22.2	40.6	34.3	20.1	27.8	20.8	20.1	19.1	24.2	48.5
Electronics	0.4	1.1	1.2	0.7	0.8	1.1	0.4	0.2	2.0	0.3	0.6
Computer Integrated Manufacturing	1.0	1.2	0.7	1.1	1.4	0.9	1.1	2.3	8.6	10.5	11.0
Material Design	0.0	0.0	0.0	0.1	0.2	6.8	0.0	0.2	0.1	0.2	0.9
Aerospace	2.4	1.3	3.1	3.6	13.6	22.5	19.9	7.8	4.6	10.3	6.6
Weapons and Nuclear	0.2	0.0	0.3	1.0	2.5	0.3	0.8	0.3	0.2	0.0	0.0
Total	**29.7**	**33.4**	**58.7**	**54.2**	**60.3**	**87.8**	**58.3**	**51.5**	**65.7**	**70.2**	**106.6**

% change from previous year

	1997	1998	1999	2000	2001	2002	2003[r]	2004[r]	2005[r]	2006[p]
Biotechnology	423.1	1441.7	-94.9	-100.0	-	606.6	219.6	264.1	42.7	-41.1
Life Sciences	7.2	110.5	8.0	-11.1	-5.7	194.2	46.9	55.5	-27.0	66.4
Opto-Electronics	154.8	31.0	22.3	99.1	41.2	-86.2	-11.4	8.3	11.6	49.6
Computers and Telecommunications	3.0	82.7	-15.6	-41.4	38.2	-24.9	-3.7	-4.9	27.1	100.0
Electronics	177.3	6.7	-40.6	12.4	39.7	-63.6	-40.8	782.5	-87.8	154.8
Computer Integrated Manufacturing	21.0	-39.6	51.9	33.4	-39.2	21.9	118.0	270.2	23.2	4.3
Material Design	-100.0	-	-	216.0	2663.1	-99.7	944.6	-66.8	184.4	429.6
Aerospace	-43.8	131.0	17.1	278.5	65.0	-11.6	-60.7	-41.0	123.7	-36.3
Weapons and Nuclear	-91.8	1165.9	276.9	164.2	-86.4	136.8	-63.4	-34.0	-93.2	-66.9
Total	**12.7**	**75.4**	**-7.5**	**11.1**	**45.7**	**-33.7**	**-11.6**	**27.6**	**6.9**	**51.8**

[r] Revised
[p] Preliminary

Source: BC Stats

Table 45. Imports of High Technology Goods from the European Union, by Commodity Group, 1996-2006

Value ($000,000)

	1996	1997	1998	1999	2000	2001	2002	2003[r]	2004[r]	2005[r]	2006[p]
Biotechnology	5.6	8.0	12.1	8.2	10.1	28.9	21.4	17.7	16.3	16.3	21.6
Life Sciences	61.3	76.4	82.9	94.4	116.9	133.2	132.7	141.2	135.2	143.2	156.3
Opto-Electronics	3.3	3.4	3.1	3.6	5.9	5.5	8.2	9.4	10.0	10.7	6.4
Computers and Telecommunications	50.7	69.6	85.8	114.3	190.6	104.6	110.2	108.0	115.5	96.7	101.6
Electronics	34.2	35.3	50.0	48.3	34.0	15.9	20.5	25.2	28.7	22.2	19.2
Computer Integrated Manufacturing	19.1	16.3	12.4	13.7	19.0	20.9	25.6	22.1	25.7	27.0	24.4
Material Design	1.5	1.3	2.6	4.3	12.8	15.0	2.7	3.1	2.9	2.4	2.2
Aerospace	121.7	292.9	244.9	375.9	260.1	446.9	350.8	155.4	119.8	89.0	106.7
Weapons and Nuclear	8.8	8.0	6.1	5.8	8.8	8.7	5.7	5.4	10.7	3.9	5.3
Total	**306.3**	**511.1**	**499.9**	**668.5**	**658.1**	**779.5**	**677.8**	**487.5**	**464.7**	**411.2**	**443.7**

% change from previous year

	1997	1998	1999	2000	2001	2002	2003[r]	2004[r]	2005[r]	2006[p]
Biotechnology	42.3	51.1	-31.8	22.4	185.9	-25.9	-17.3	-8.0	0.1	32.5
Life Sciences	24.7	8.6	13.8	23.9	13.9	-0.3	6.4	-4.3	5.9	9.2
Opto-Electronics	1.4	-9.4	17.8	63.3	-7.3	49.0	14.9	7.2	6.3	-40.0
Computers and Telecommunications	37.2	23.3	33.2	66.7	-45.1	5.4	-2.1	7.0	-16.3	5.1
Electronics	3.2	41.6	-3.4	-29.6	-53.3	29.3	22.7	13.8	-22.6	-13.6
Computer Integrated Manufacturing	-14.4	-24.2	10.5	38.5	10.5	22.1	-13.5	15.9	5.4	-9.6
Material Design	-17.9	110.7	62.9	195.5	17.4	-81.9	14.2	-6.5	-17.6	-7.8
Aerospace	140.6	-16.4	53.5	-30.8	71.8	-21.5	-55.7	-22.9	-25.7	19.9
Weapons and Nuclear	-8.7	-23.8	-6.0	52.6	-0.4	-35.0	-4.3	97.0	-63.9	37.1
Total	**66.9**	**-2.2**	**33.7**	**-1.6**	**18.4**	**-13.0**	**-28.1**	**-4.7**	**-11.5**	**7.9**

[r] Revised
[p] Preliminary

Source: BC Stats

Table 46. Balance of Trade in High Technology Goods with the European Union, by Commodity Group, 1996-2006

Balance ($000,000)

	1996	1997	1998	1999	2000	2001	2002	2003[r]	2004[r]	2005[r]	2006[p]
Biotechnology	-5.6	-7.9	-10.8	-8.2	-10.1	-28.8	-21.3	-17.4	-15.3	-14.9	-20.7
Life Sciences	-59.2	-74.1	-78.4	-89.5	-112.6	-129.1	-120.7	-123.8	-108.1	-121.1	-123.1
Opto-Electronics	-1.0	2.2	4.0	5.1	11.7	19.2	-4.8	-6.1	-6.6	-6.8	-0.5
Computers and Telecommunications	-27.2	-45.3	-43.3	-76.5	-162.7	-72.7	-85.8	-82.4	-91.0	-61.8	-46.0
Electronics	-31.6	-28.6	-43.0	-35.2	1.0	3.8	-13.0	-3.2	4.4	14.4	35.3
Computer Integrated Manufacturing	-18.0	-15.2	-11.7	-12.6	-17.5	-20.0	-24.5	-19.8	-16.8	-15.4	-9.0
Material Design	-1.5	-1.3	-2.6	-4.2	-12.5	-8.1	-2.7	-2.8	-2.7	-1.6	-1.0
Aerospace	-118.6	-290.7	-240.3	-369.9	-237.8	-416.8	-318.6	-140.4	-108.4	-66.3	-77.3
Weapons and Nuclear	-8.5	-7.9	-5.8	-4.6	-5.9	-8.3	-4.8	-4.7	-10.4	-3.4	-4.8
Total	**-271.2**	**-468.8**	**-431.8**	**-595.6**	**-546.4**	**-661.0**	**-596.2**	**-400.6**	**-355.0**	**-276.8**	**-247.2**

Note: The trade balance is the net of *total* exports minus total imports. Total exports include re-exports, whereas *domestic* exports are shipments of goods produced within Canada only (in the case of tables in this report, within BC only).

[r] Revised
[p] Preliminary

Source: BC Stats

Table 47. Exports of High Technology Services, 1997-2006

BRITISH COLUMBIA
Value ($ millions)

	1997	1998	1999	2000	2001	2002[r]	2003[r]	2004[r]	2005[r]	2006[p]
Computer and Related Services	237	456	687	907	957	823	993	1,196	1,380	1,563
Motion Picture Production & Post-Production	16	45	234	190	175	252	376	235	404	380
Telecommunications and Related	205	221	199	169	152	178	183	178	166	173
Engineering Services	443	222	169	103	137	112	216	211	212	237
Other Services	52	60	55	72	84	219	201	212	226	240
Total	**954**	**1,004**	**1,343**	**1,439**	**1,505**	**1,584**	**1,970**	**2,032**	**2,388**	**2,595**

% change from previous year

	1998	1999	2000	2001	2002[r]	2003[r]	2004[r]	2005[r]	2006[p]
Computer and Related Services	92.3	50.5	32.0	5.6	-14.0	20.8	20.4	15.4	13.3
Motion Picture Production & Post-Production	173.8	421.0	-18.9	-7.7	43.9	48.9	-37.4	71.8	-5.8
Telecommunications and Related	7.7	-10.0	-15.3	-9.6	16.6	3.1	-2.8	-7.0	4.8
Engineering Services	-50.0	-23.9	-39.0	33.0	-18.2	93.6	-2.4	0.4	11.9
Other Services	14.3	-8.5	30.9	17.4	160.8	-8.4	5.2	7.0	6.2
Total	**5.2**	**33.8**	**7.2**	**4.6**	**5.2**	**24.4**	**3.2**	**17.5**	**8.7**

CANADA
Value ($ millions)

	1997	1998	1999	2000	2001	2002[r]	2003[r]	2004[r]	2005[r]	2006[p]
Computer and Related Services	2,675	2,984	4,728	5,469	5,601	5,075	4,729	4,919	5,361	5,963
Motion Picture Production & Post-Production	609	645	921	799	896	989	889	963	967	1,085
Telecommunications and Related	1,352	1,494	1,398	1,219	1,444	1,473	1,484	1,692	1,743	1,871
Engineering Services	1,394	1,384	1,104	950	1,076	1,304	1,458	1,822	2,055	2,234
Other Services	299	368	347	414	577	1,363	1,252	1,191	1,256	1,305
Total	**6,329**	**6,875**	**8,497**	**8,851**	**9,595**	**10,203**	**9,812**	**10,588**	**11,381**	**12,459**

% change from previous year

	1998	1999	2000	2001	2002[r]	2003[r]	2004[r]	2005[r]	2006[p]
Computer and Related Services	11.5	58.5	15.7	2.4	-9.4	-6.8	4.0	9.0	11.2
Motion Picture Production & Post-Production	5.8	42.8	-13.2	12.1	10.3	-10.1	8.4	0.4	12.3
Telecommunications and Related	10.5	-6.4	-12.8	18.5	2.0	0.7	14.0	3.0	7.3
Engineering Services	-0.7	-20.2	-14.0	13.2	21.2	11.8	25.0	12.8	8.7
Other Services	23.1	-5.8	19.3	39.6	136.0	-8.1	-4.9	5.4	3.9
Total	**8.6**	**23.6**	**4.2**	**8.4**	**6.3**	**-3.8**	**7.9**	**7.5**	**9.5**

[r] Revised
[p] Preliminary

Source: BC Stats and Statistics Canada

Table 48. Domestic Exports of High Technology Goods by Province, 1996-2006

Value ($ millions)

	1996	1997	1998	1999	2000	2001	2002	2003[r]	2004[r]	2005[r]	2006[p]
British Columbia	450.6	581.4	769.2	840.1	923.1	748.1	684.6	635.2	686.5	703.9	852.6
Alberta	1,386.1	1,238.4	1,540.9	1,915.6	4,375.7	2,439.0	1,889.6	1,181.6	1,131.7	1,023.6	1,225.4
Ontario	10,189.7	10,899.2	11,782.7	12,338.3	15,186.1	13,512.8	10,282.4	8,430.0	9,377.9	10,897.2	11,432.7
Quebec	9,035.0	9,801.7	11,860.1	13,835.2	20,677.2	16,948.2	14,496.9	14,269.4	13,222.0	13,607.2	12,478.9
Canada	**21,643.7**	**23,229.3**	**26,829.2**	**29,854.5**	**42,221.3**	**34,594.9**	**28,012.8**	**25,163.3**	**24,965.6**	**26,861.7**	**26,768.2**

% change from previous year

	1997	1998	1999	2000	2001	2002	2003[r]	2004[r]	2005[r]	2006[p]
British Columbia	29.0	32.3	9.2	9.9	-19.0	-8.5	-7.2	8.1	2.5	21.1
Alberta	-10.7	24.4	24.3	128.4	-44.3	-22.5	-37.5	-4.2	-9.6	19.7
Ontario	7.0	8.1	4.7	23.1	-11.0	-23.9	-18.0	11.2	16.2	4.9
Quebec	8.5	21.0	16.7	49.5	-18.0	-14.5	-1.6	-7.3	2.9	-8.3
Canada	**7.3**	**15.5**	**11.3**	**41.4**	**-18.1**	**-19.0**	**-10.2**	**-0.8**	**7.6**	**-0.3**

High Technology Share of Total Domestic Exports (%)

	1996	1997	1998	1999	2000	2001	2002	2003[r]	2004[r]	2005[r]	2006[p]
British Columbia	1.7	2.2	3.0	2.9	2.7	2.4	2.4	2.2	2.2	2.1	2.6
Alberta	4.4	3.7	5.0	5.5	7.9	4.3	3.9	2.1	1.7	1.3	1.5
Ontario	8.0	7.8	7.6	7.0	8.2	7.6	5.7	5.0	5.2	6.0	6.4
Quebec	19.3	19.5	21.4	23.2	29.0	24.9	22.1	23.4	20.5	20.3	18.1
Canada	8.3	8.3	9.0	9.0	10.9	9.2	7.7	7.1	6.5	6.6	6.5

Note that high technology exports for Canada, Alberta, Ontario and Quebec are based on high tech definitions developed for British Columbia. If these definitions were derived specifically for any of those regions, they might differ slightly.

[r] Revised
[p] Preliminary

Source: BC Stats

Table 49. Imports of High Technology Goods, Canada and BC, 1996-2006

Value ($ millions)

	1996	1997	1998	1999	2000	2001	2002	2003[r]	2004[r]	2005[r]	2006[p]
British Columbia	2,842.9	3,658.8	3,978.1	4,249.3	4,475.0	4,480.6	4,306.1	4,106.8	4,440.4	4,651.5	4,773.7
Canada	**34,008.4**	**40,106.6**	**42,519.1**	**48,284.9**	**57,512.4**	**50,399.2**	**44,305.2**	**40,891.8**	**44,125.7**	**46,407.4**	**47,020.3**

% change from previous year

	1997	1998	1999	2000	2001	2002	2003[r]	2004[r]	2005[r]	2006[p]
British Columbia	28.7	8.7	6.8	5.3	0.1	-3.9	-4.6	8.1	4.8	2.6
Canada	**17.9**	**6.0**	**13.6**	**19.1**	**-12.4**	**-12.1**	**-7.7**	**7.9**	**5.2**	**1.3**

Note that high technology imports for Canada are based on high tech definitions developed for British Columbia. If these definitions were derived specifically for any of those regions, they might differ slightly.

[r] Revised
[p] Preliminary

Source: BC Stats

Table 50. United States High Technology Commodity Trade, 1996-2006

Value ($US millions)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Domestic Exports	133,241.6	157,958.2	168,296.1	178,519.9	197,109.5	172,412.2	153,273.5	151,535.4	166,441.8	177,599.6	209,052.1
Re-Exports	19,280.1	19,637.3	18,256.3	21,488.0	30,051.5	27,694.6	25,353.8	28,251.2	35,012.2	38,006.1	43,517.1
Imports	129,265.8	145,055.5	156,528.2	180,646.3	222,146.4	195,265.2	196,100.1	207,195.8	238,478.3	259,968.7	290,848.0
Balance of Trade	**23,256.0**	**32,539.9**	**30,024.2**	**19,361.5**	**5,014.6**	**4,841.5**	**-17,472.8**	**-27,409.3**	**-37,024.2**	**-44,363.0**	**-38,278.8**

% change from previous year

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Domestic Exports	18.6	6.5	6.1	10.4	-12.5	-11.1	-1.1	9.8	6.7	17.7
Re-Exports	1.9	-7.0	17.7	39.9	-7.8	-8.5	11.4	23.9	8.6	14.5
Imports	12.2	7.9	15.4	23.0	-12.1	0.4	5.7	15.1	9.0	11.9
Balance of Trade	**39.9**	**-7.7**	**-35.5**	**-74.1**	**-3.5**	**-460.9**	**56.9**	**35.1**	**19.8**	**-13.7**

Source: BC Stats and US Department of Commerce

Table 51. High Technology Trade Comparison: United States vs. Canada and BC (in Canadian $), 1996-2006

Value ($Cdn millions)

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Domestic Exports											
United States*	181,677.9	218,708.6	249,668.2	265,227.9	292,785.2	267,038.9	240,691.9	212,303.3	216,587.8	215,145.1	237,138.3
British Columbia	450.6	581.4	769.2	840.1	923.1	748.1	684.6	635.2	686.5	703.9	852.6
Canada	21,643.7	23,229.3	26,829.2	29,854.5	42,221.3	34,594.9	28,012.8	25,163.3	24,965.6	26,861.7	26,768.2
Imports											
United States*	176,256.7	200,843.6	232,210.4	268,387.2	329,975.0	302,434.6	307,944.4	290,284.5	310,327.5	314,927.4	329,923.4
British Columbia	2,842.9	3,658.8	3,978.1	4,249.3	4,475.0	4,480.6	4,306.1	4,106.8	4,440.4	4,651.5	4,773.7
Canada	34,008.4	40,106.6	42,519.1	48,284.9	57,512.4	50,399.2	44,305.2	40,891.8	44,125.7	46,407.4	47,020.3

% change from previous year

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Domestic Exports										
United States*	20.4	14.2	6.2	10.4	-8.8	-9.9	-11.8	2.0	-0.7	10.2
British Columbia	29.0	32.3	9.2	9.9	-19.0	-8.5	-7.2	8.1	2.5	21.1
Canada	7.3	15.5	11.3	41.4	-18.1	-19.0	-10.2	-0.8	7.6	-0.3
Imports										
United States*	13.9	15.6	15.6	22.9	-8.3	1.8	-5.7	6.9	1.5	4.8
British Columbia	28.7	8.7	6.8	5.3	0.1	-3.9	-4.6	8.1	4.8	2.6
Canada	17.9	6.0	13.6	19.1	-12.4	-12.1	-7.7	7.9	5.2	1.3

* Converted from US dollars using an average annual exchange rate

Source: BC Stats and US Department of Commerce

Appendix A:
Defining the High Technology Sector

How was the sector definition arrived at?

In 1995, BC Stats and the Science and Technology Division of the Ministry of Employment and Investment developed a definition of the high technology sector that focused on standard industries that produce high technology goods and services as their ultimate outputs. The definition looked at the high tech outputs of various standard industries (industries defined in the Canadian Standard Industrial Classification—SIC), their level of research activity, their representation in existing lists of high tech companies, and the opinions of an expert panel drawn from government, university, and the private sector.[20] The SIC data series have since been discontinued and a new classification system, the North American Industry Classification System (NAICS), has been implemented.

The adoption of NAICS-based industry definitions made it necessary to revisit the definition on which the high-tech estimates were based, since many of the industry groupings previously used were no longer available. During 2001, in consultation with industry stakeholders, BC Stats developed a new definition of the high technology sector that was based on the NAICS industry categories. The process of developing the criteria for including or excluding specific industries in the definition was similar to that of the original SIC-based definition as commodity lists, research activities and company lists were once again examined. In addition, since an accepted SIC-based definition was already available, an SIC to NAICS concordance was used as a starting point.[21]

The definition originally chosen (based on theoretical considerations) proved to be only a starting point, as much of the information required to compile high technology statistics was not available at the required level of detail. A working definition, based on

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[20] The complete methodology is presented in Lawrance, J. and Miller, S. *Defining the British Columbia High Technology/Knowledge Sector*. (1996). BC Stats, Ministry of Government Services, and Ministry of Employment and Investment, Government of British Columbia. This document is available on-line at:

http://www.bcstats.gov.bc.ca/data/bus_stat/busind/hi_tech/ht_def.pdf

[21] A more detailed discussion of the methodology is presented in Miller, S. and Adams, S. *Defining the British Columbia High Technology Sector Using NAICS*. (2001). BC Stats, Ministry of Management Services, Government of British Columbia. This document is available on-line at:

http://www.bcstats.gov.bc.ca/data/bus_stat/busind/hi_tech/NAICSdef.pdf

availability of data, was adopted in order to prepare the estimates presented in the *Profile* report.

In recent years, a more broadly-based view of high technology has evolved, which encompasses some industries not considered high tech just a few years ago, such as various communications technologies. In recognition of this, the definition was expanded in 2005 to include some of these industries. The new industries added to the existing definition were determined through a review of literature pertaining to high technology definitions in use elsewhere, particularly those from the American Electronics Association (whose definition has been widely used by institutions around the world) and Industry Canada.[22]

Are all high tech companies included?

It is recognized that there are some drawbacks to the industry-based definition employed here. The first is that the NAICS does not fully recognize industries of the "new economy." As a result, new products and services are often grouped in an industry that primarily produces similar but distinctly different products and services.

Second, it is difficult to capture the full breadth of high technology or knowledge-intensive activity in the economy through NAICS-based definitions. Innovation is not unique to a specific group of industries, but can be found throughout the whole economy. Some firms on the "leading edge" will be missed if they are classified in industries that, in aggregate, fail to show high tech characteristics. On the other hand, it is impossible to remove those firms that lag behind the industry norm from the industries in the sector.

The industries included in the definition adopted for this profile represent the core of the high technology sector. While it is certainly true that examples of creativity and innovation can be found in every industry, this definition, with its industry focus, includes only those industries where high technology activity is concentrated.

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[22] Platzer, M., Novak, C.A. and Kazmierczak, M.F. (February 2003). *Defining the High-Tech Industry*. American Electronics Association.

E. Wayne Clendenning & Associates (May 2000). *Comparison and Reconciliation of SIC and NAICS Industry Codes Used to Define Knowledge-Based Industries (KBIs)*. Industry Canada.

Exactly which industries are included?

The table below lists the industries that are defined, for the purpose of this report, to constitute the high technology sector.

Industries in the High Technology Sector

NAICS	Industry
Manufacturing Industries	
325189	Other Inorganic Chemicals
325410	Pharmaceutical and Medicine
333310	Commercial and Service Industry
334110	Computer and Peripheral
334210	Telephone Apparatus
334220	Radio, Television Broadcasting & Wireless Communications Equipment
334290	Other Communications Equipment
334310	Audio and Video Equipment
334410	Semiconductor and Other Electronic Components
334511	Navigational and Guidance Instruments
334512	Measuring, Medical and Controlling Devices
334610	Manufacturing and Reproducing Magnetic and Optical Media
335315	Switchgear and Switchboard, and Relay and Industrial Control Apparatus
335920	Communication and Energy Wire and Cable
335990	All Other Electrical Equipment and Component
336410	Aerospace Products and Parts
339110	Medical Equipment and Supplies
Service Industries	
511210	Software Publishers
512110	Motion Picture and Video Production
512190	Post-Production and Other Motion Picture and Video Industries
515210	Pay and Specialty Television
516110	Internet Publishing and Broadcasting
517110	Wired Telecommunications Carriers
517210	Wireless Telecommunications Carriers (Except Satellite)
517310	Telecommunications Resellers
517410	Satellite Telecommunications
517510	Cable and Other Program Distribution
517910	Other Telecommunications
518111	Internet Service Providers
518112	Web Search Portals
518210	Data Processing, Hosting and Related
541330	Engineering
541360	Geophysical Surveying and Mapping Services
541370	Surveying and Mapping (Except Geophysical) Services
541380	Testing Laboratories
541510	Computer Systems Design and Related
541620	Environmental Consulting
541690	Other Scientific and Technical Consulting
541710	Research and Development in Physical, Engineering and Life Sciences
541720	Research and Development in the Social Sciences and Humanities

Note: For the purposes of this report, the manufacturing NAICS industries are grouped together as "Manufacturing." For services, Engineering (541330) is reported as a separate industry. The other industries are aggregated into groups to maintain confidentiality requirements and still allow for some detailed reporting. Computer and Related Services includes 511210, 516110, the 518 NAICS codes and 541510. The remaining 541 NAICS codes are grouped into a category called "Other Services." The 517 NAICS codes and 515210 are covered under a single "Telecommunications and Related" classification and 512110 and 512190 are grouped under "Motion Picture Production and Post Production."

High Technology Industries

Manufacturing

325189 Other Inorganic Chemicals Comprises establishments engaged in the manufacture of high tech inorganic chemicals such as enriched uranium and radioactive isotopes.

325410 Pharmaceuticals and Medicine Consists of firms engaged in the manufacture of drugs, medicines and related products for human or animal use, including cutting edge products developed through considerable research efforts.

333310 Commercial and Service Industry Machinery Contains establishments that manufacture machinery for use in commercial and service industries, including high tech optical instruments and photographic equipment.

334110 Computers and Peripheral Equipment Comprises establishments primarily engaged in the manufacture of computers and peripheral computer equipment such as storage devices, CD-ROM and DVD drives, optical readers and scanners, etc.

334210 Telephone Apparatus Contains firms that manufacture wired telephone and data communications equipment, including cordless telephones, facsimile equipment, local area network (LAN) equipment, etc.

334220 Radio and Television Broadcasting and Wireless Communications Equipment Consists of firms primarily engaged in manufacturing radio and television broadcast and wireless communication equipment, including satellites, GPS (global positioning system) and pagers.

334290 Other Communications Equipment Comprises establishments engaged in the manufacture of other types of communications equipment, such as traffic signals, fire detection and alarm systems, remote control units, intercom systems, etc.

334310 Audio and Visual Equipment Establishments engaged in manufacturing electronic audio and video equipment such as compact disc and DVD players, televisions, etc.

334410 Semiconductor and Other Electronic Components Consists of firms engaged in the manufacture of semiconductor devices and other electronic components such as circuit boards, microprocessor chips and other computer parts, fibre-optic connectors, etc.

*334511 **Navigational and Guidance Instruments*** Comprises establishments primarily engaged in navigational and guidance instruments such as air traffic control radar systems, sonar, etc.

*334512 **Measuring, Medical and Controlling Devices*** Establishments engaged mainly in the manufacturing equipment such as high tech medical devices, laboratory analytical and testing instruments, industrial process control instruments, etc.

*334610 **Manufacturing and Reproducing Magnetic and Optical Media*** Contains establishments primarily engaged in manufacturing magnetic and optical media such as compact discs, computer software, etc.

*335315 **Switchgear and Switchboard, and Relay and Industrial Control Apparatus*** Comprises establishments engaged in manufacturing electrical switchgear and protective equipment, including high tech switching devices.

*335920 **Communication and Energy Wire and Cable*** Consists of firms engaged in the manufacture of communications and energy wire and cable such as high tech fibre-optic cable.

*335990 **All Other Electrical Equipment and Components*** Comprises establishments engaged in manufacturing electrical equipment and components, including fuel cells.

*336410 **Aerospace Products and Parts*** Establishments engaged in manufacturing aircraft, missiles, space vehicles, etc.

*339110 **Medical Equipment and Supplies*** Contains firms that manufacture medical equipment and supplies including high tech laboratory and dental equipment.

Services

*511210 **Software Publishers*** Establishments engaged in producing and distributing computer software.

*512110 **Motion Picture and Video Production*** Comprises firms engaged in producing motion pictures, videos, television programs and commercials.

*512190 **Post-Production and Other Motion Picture and Video Industries*** Consists of establishments engaged in providing post-production services and services to the motion picture and video industries, including high tech special effects and animation.

*515210 **Pay and Specialty Television*** Establishments engaged in broadcasting television programs on specialty cable networks, pay television or satellite networks.

*516110 **Internet Publishing and Broadcasting*** Comprises firms primarily engaged in publishing and/or broadcasting content on the Internet.

*517110 **Wired Telecommunications Carriers*** Consists of establishments engaged in operating and maintaining network facilities for the transmission of voice, data, text, sound and video.

*517210 **Wireless Telecommunications Carriers (Except Satellite)*** Comprises establishments engaged in operating and maintaining switching and transmission facilities to provide direct communications via the airwaves.

*517310 **Telecommunications Resellers*** Establishments that resell telecommunications services purchased from operators of telecommunications networks.

*517410 **Satellite Telecommunications*** Contains firms engaged in operating and maintaining satellite telecommunications facilities.

*517510 **Cable and Other Program Distribution*** Establishments engaged in distributing television and radio programs via cable or satellite distribution systems.

*517910 **Other Telecommunications*** Comprises establishments primarily engaged in providing specialized telecommunications services, such as satellite tracking and telemetry, and radar station operation.

*518111 **Internet Service Providers*** Establishments that provide Internet services such as access to the Internet, web hosting and consulting related to Internet connectivity.

*518112 **Web Search Portals*** Comprises establishments engaged in operating web search portals.

*518210 **Data Processing, Hosting and Related*** Consists of firms engaged in providing hosting or data processing services.

*541330 **Engineering*** Comprises establishments engaged in engineering activities in design, development and utilization of machines, instruments, systems, etc.

*541360 **Geophysical Surveying and Mapping Services*** Establishments engaged in gathering, interpreting and mapping geophysical data.

*541370 **Surveying and Mapping (Except Geophysical) Services*** Contains firms engaged in providing surveying and mapping services of the surface of the earth, including the sea floor.

*541380 **Testing Laboratories*** Consists of establishments engaged in providing physical, chemical and other analytical testing services.

*541510 **Computer Systems Design and Related*** Establishments that provide expertise in the field of information technologies through writing and supporting computer software, and computer systems design and maintenance.

*541620 **Environmental Consulting*** Comprises establishments primarily engaged in providing consulting services on environmental issues using a staff of scientists, engineers and other technicians.

*541690 **Other Scientific and Technical Consulting*** Consists of firms engaged in providing advice and assistance on scientific and technical issues (other than environmental issues).

*541710 **and 541720 Scientific Research and Development*** Establishments engaged in research and experimental development in areas such as biotechnology, computers, physics, mathematics, etc.

Note that these NAICS codes are based on the 2002 NAICS definition. This NAICS definition will soon be replaced by an updated 2007 classification system with changes to some industry groupings, including a few in the high technology sector. The 2007 NAICS has already been applied to the data from Statistics Canada's *Business Register*, which is the source for counts of establishments. The industries affected are primarily related to Internet technologies. NAICS 517110 has been expanded to include a portion of 518111 and has been recoded to 517111 *Wired Telecommunications Carriers (except Cable)*. NAICS 517510 has been expanded to include another portion of 518111 and has been recoded to 517112 *Cable and Other Program Distribution*. The remainder of 518111 has been grouped with 517310 and 517910 to form a redefined 517910 *Other Telecommunications*. Additionally, NAICS 516110 and 518112 have been grouped together into a new category, 519130 *Internet Publishing and Broadcasting and Web Search Portals*.

Unfortunately, the change to 518111 has resulted in the move of Internet service providers from the defined group "Computer and related services" to "Telecommunications" and has caused a small break in the data for establishments by industry. It also means that the industry groupings for the establishment counts are slightly different than those for employment, GDP, wages and revenue, since these data are still based on the 2002 NAICS. An attempt to regroup the data based on 2002 NAICS into categories consistent with the new NAICS scheme would likely result in confidentiality concerns that would force us to suppress all historical data for those industry groups. As such, in order to provide as much detail as possible, the industry groupings for the data based on 2002 NAICS have been preserved. At some point in the next couple of years, Statistics Canada will convert its other data sources to the revised NAICS classification and at that time, there will likely be a small break in the other economic variables presented in this report, just as there is with establishment counts in this edition.

Appendix B:
Defining High Technology Commodities

Defining high technology commodities

Developing a definitive list of what commodities should be considered high technology is a difficult exercise. Leading technologies are continually evolving and what is considered high technology today may be classified as low tech tomorrow. As a result, the definition of high technology commodities must necessarily change over time. This means that data regarding high technology trade from 1996 may contain commodities that are no longer included in the 2006 definition. However, this does not mean that this data cannot be compared over time. It is still valid to look at growth rates over that period as long as it is clear that the rates represent growth in the changing definition of high technology, rather than a static basket of goods.[23]

The commodity list used by BC Stats to define high technology goods is based on the US Bureau of the Census' advanced technology products (ATP) list.[24] The list of American commodity codes was matched against the equivalent Canadian codes. In many cases the codes matched exactly and no further effort needed to be expended. However, in other cases there was not an exact match, particularly for exports, which are coded to only eight digits. For these commodity groups, further analysis was undertaken using available data from the US Bureau of the Census and Statistics Canada to determine whether or not the majority of these codes were high technology (as defined by the ATP list). If it was judged that this was not the case, the commodity was excluded from the high tech definition. While this may result in some high technology products being excluded from the definition, it should be balanced to some extent by those commodity classifications that, although they are mainly high technology, still include some "low tech" goods. Since

[23] One technical limitation that may cause difficulty in temporal comparisons is when there are changes to the definition of Harmonized System codes. When this occurs, there may be a resulting unintended change to the high technology commodity definition. This is due to the fact that the code may now include or exclude commodities that it did not previously, such that these goods can no longer be separated out (or perhaps can be more finely defined, so that low technology commodities that previously had to be included can now be expunged from the definition). However, these changes are usually small and should not have a significant impact on the data.

[24] For a discussion of the development and content of this list, see: McGuckin, R. H., Abbott, T. A., Herrick, P. and Norfolk, L. (1991). *Measuring Advanced-Technology Products Trade: A New Approach.* US Bureau of the Census.

the ATP list itself is defined using classification codes, this kind of trade-off is already present in the definition. No exact measure of high technology trade is possible to achieve since high technology is subjective to begin with, but this definition should be in line with what most people would agree is high technology.

Note that a commodity need not be produced by one of the industries included in the industry-based high technology definition in order to be considered a high technology product. Some industries not included in the high tech definition, because they mainly manufacture low technology goods, may also manufacture some high technology products. Conversely, it is possible for those industries classified as high technology to also manufacture some products that are considered low tech.

Calculating BC consumed imports

At this time, Statistics Canada does not produce data on imports by province of consumption, rather, only by province of clearance. An estimate of BC consumed imports was derived using the consumption of Canadian imports of those commodities by the BC economy and applying this ratio to total Canadian imports.

Data source

Data for trade in goods are supplied by Statistics Canada and are provided through the Trade Research and Inquiry Package (TRIP) computer reporting system at BC Stats. TRIP offers user-defined tabulations of export or import statistics for British Columbia, Canada, the United States and other countries. Tabulations can include information on commodities, countries, US states, years, months, mode of transport, etc.

Commodity groups

The US Bureau of the Census has defined ten fields involving advanced or high technology commodities. Each field represents a large number of products and processes that are considered to be on the leading edge. These fields have been used to classify exports and imports in this report.

Aerospace Technological developments in this field include advances that allow planes to fly further, faster, higher, to use less fuel and to have quieter engines. Many of the advances have been adapted to military applications, such as vertical take-off aircraft and aircraft that require shorter distances for takeoff and landings.

Biotechnology Biotechnology covers recent developments in recombinant deoxyribonucleic acid (DNA) research and genetic engineering. Obvious examples include drugs, enzymes and other therapeutic items. Common applications include agricultural production and the use of microorganisms for the production of drugs and other complex molecules.

Computer and Telecommunications This field covers technological advances affecting both computers and telecommunications hardware products. The primary advances in this field are in developing hardware that can process information more quickly. Important breakthroughs are expected in the areas of artificial intelligence and parallel processing.

Computer Integrated Manufacturing This field includes developments in robotics and numerically controlled (NC) machines. These products have a significant impact on industrial automation. Robots and NC machines perform increasingly sophisticated operations through developments in sensory and visual capabilities of machines. With these breakthroughs, the manufacturing processes have increased in flexibility and require less human intervention to operate and maintain production machinery. Many of the new automation technologies are made possible because of breakthroughs in the application and development of faster, smaller components.

Electronics The miniaturization of electronic components is the most important recent technological advance in the field of electronics. Some technologies included are integrated circuits, semiconductors, such as transistors and diodes, as well as new developments in surface mounting of electronic components such as capacitors and resistors.

Life Sciences (Medical) This field encompasses the application of scientific advances to medical sciences. Recent advances such as nuclear resonance imaging, echo cardiographs and total-patient monitoring systems are examples of products developed from recent technological advances in this field. Also, recent increases in the strength of materials and reductions in their weight have led to improved internally implemented fixation devices and prostheses.

Materials Design Materials design includes the newest methods of production for products that already exist in the market as well as the development of new products. Recent examples of technological advancements include high temperature superconductors, advanced polymers that expand the areas of plastic use and new ultra

clear glass that allows fibre-optic cable to be used for long distance communication.

Nuclear Technology This field covers developments in nuclear power production and primary nuclear reactors. It includes newly designed reactor components that improve the safety and efficiency of nuclear power plants. It also includes developments in the creation and packaging of nuclear fuel, the application of atomic physics to medical and other areas of science.

Opto-Electronics Opto-electronics is generally defined as the expanded development and application of the laser. Also included are recent advances in photoelectric cells and diodes, photographic and other imaging equipment, and fibre-optic cables.

Weapons This field covers all advanced methods used for the development, guidance, and control of weapons intended for national or personal protection and deterrence. Many of the developments in this area are the result of breakthroughs in computers and telecommunications as well as aerospace technologies.